



# AGRICULTURAL OUTLOOK

December 1987

• Economic Research Service  
United States Department of Agriculture

Changes Afoot for the  
Farm Credit System

# AGRICULTURAL OUTLOOK

December 1987/AO-137



## Departments

- 2 Agricultural Economy
- 12 Commodity Spotlights
  - World Oats Trade & U.S. Imports
  - Pork Supply Bulge Pushes Down Prices
  - Certificates Will Impact Corn & Wheat in 1987/77
  - Parsley Root & Purple Potatoes: Specialty Produce Piques Interest
- 18 Farm Finance
- 20 World Agriculture & Trade
- 23 Resources

## Special Articles

- 25 Fundamental Changes Ahead for the Farm Credit System
- 29 The Long-Range Outlook for China's Agricultural Production & Trade

## Statistical Indicators

- |                                   |  |
|-----------------------------------|--|
| 33 Summary Data                   | 49 World Agriculture                             |
| 34 U.S. and Foreign Economic Data | 50 U.S. Agricultural Trade                       |
| 35 Farm Prices                    | 53 Farm Income                                   |
| 36 Producer and Consumer Prices   | 56 Transportation                                |
| 38 Farm-Retail Price Spreads      | 57 Indicators of Farm Productivity and Input Use |
| 40 Livestock and Products         | 57 Food Supply and Use                           |
| 44 Crops and Products             |  |

Economics Editor — Clark Edwards (202) 786-3313

Associate Economics Editor — Herb Moses (202) 786-3313

Managing Editor — Patricia F. Singer (202) 786-1494

Editorial Staff — Shirley Hammond, Wendy Pinchas, Eric Sorensen

Statistical Coordinator — Ann Duncan (202) 786-3313

Design Coordinator — Carolyn Riley

Design Staff — Michael Hunter

Production Staff — Karen Sayre, Tracy Fleck

Composition — Joyce Bailey

Annual subscription: \$22 U.S., \$27.50 foreign. Order from USDA/ERS, P.O. Box 1608, Rockville, MD 20850. Make check payable to USDA/ERS. You will receive an acknowledgement of your subscription order. For additional subscription information, call (301) 953-2515.

The next issue of Agricultural Outlook (AO-138) is scheduled for mailing on January 7, 1988. If you do not receive AO-138 by January 21, call the managing editor at (202) 786-1494 (be sure to have your mailing label handy). The full text and tables of AO-138 will also be available electronically; additional information on this is available at (202) 447-5505.

Contents of this report have been approved by the World Agricultural Outlook Board, and the summary was released November 18, 1987. Materials may be reprinted without permission. Agricultural Outlook is published monthly, except for January/February combined issue. Price and quantity forecasts for crops are based on the November 9 World Agricultural Supply and Demand Estimates.



# In Brief . . . News of Meat Supplies, Canadian Pact, China's Outlook

U.S. agricultural exports rose \$1.6 billion to \$27.9 billion during fiscal 1987, and a further rise is seen for fiscal 1988. Most of the gain in value was for cotton, livestock products, and horticultural products.

Prices fell for most commodities this year, in some cases enough to more than offset increased volume. Grain exports climbed 16 million tons but slipped about \$400 million in value. Oilseed and product exports rose 2 million tons while value saw little change.

Large supplies of meat this season include record production of turkeys and broilers, and more pork. Milk production is up from last year's level, which was reduced by the Dairy Termination Program. Downward pressure on prices received and prospects for higher feed costs indicate reduced profits for the livestock and poultry industries in coming months.

World rice production is showing a big decline this year; drought reduced areas and yields through much of southern Asia. The sharp runup in prices will limit world rice trade. World supplies of most other crops are large and prices continue to be relatively low.

Growth in world output of edible vegetable oils will slow and consumption will rise during the 1987/88 marketing year. This will substantially reduce growth in world stocks and help stabilize prices close to their current levels. Despite the better supply-demand balance, prices will stay well below the peaks of 1983/84. The United States will show an increase in edible vegetable oil exports for the first time since 1981/82, but U.S. production and stocks are expected to rise.



Demand for generic certificates will be keen during 1987/88; heavy users are corn farmers and wheat handlers. Bids by certificate holders for CCC-owned stocks should free enough wheat to meet growing export sales. For corn, without issuances above those already anticipated, free supplies will not match expected demand for the rest of 1986/87, and corn prices will have to rise to encourage cash loan redemptions.

Consumer interest in specialty produce—the exotic and unusual fruits and vegetables now displayed along with traditional produce—is encouraging farmers all over the country to experiment with growing new crops. Moon-and-stars watermelon, purple potatoes, guavas, and twenty-first century pears are a few examples of the tropical, Mexican, Oriental, and other unusual varieties available on many restaurant menus and grocery shelves.

Canada is one of the top five customers for U.S. agricultural products. In early October, the United States and Canada signed an agreement to reduce trade barriers and help settle trade disputes. U.S. exports of fruits

and vegetables could increase if the agreement is approved. Other U.S. farm exports that could benefit include wine, poultry and eggs, some grains, and high-value and processed products. Canada could sell more beef and storage vegetables (potatoes, onions, and carrots) to the United States.

China's rapid agricultural expansion has slowed. Per capita consumption is rising faster than production, so China's position as an agricultural exporter, particularly of major commodities, is diminishing. However, the Chinese are expected to develop and produce processed goods such as beer and canned foods to compete in international markets.

Fundamental changes are ahead for the troubled Farm Credit System (FCS), the largest lender to agriculture. During the farm financial crisis of the early- to mid-1980s, the system reported large losses as farmers defaulted on their loans. Then, as farmers cash flows improved over the past 2 years, they paid down their debts faster than they sought new loans.

FCS loan losses and a reduced volume of business have put a number of member institutions in danger of financial failure, even though the FCS collectively still has a surplus. Bills in the House and Senate would restructure the system and put its capitalization on a more commercial basis, as well as create a secondary market for agricultural mortgages.

Some of these changes would reduce the local control exercised by FCS institutions and lessen the cooperative character of the system. Future pressures on the FCS to rebuild capital and repay the Government may lead to decisions that would be financially prudent but blur the distinction between the FCS and commercial banks.



## Agricultural Economy

U.S. agricultural exports rose \$1.6 billion (5 percent) and 20 million metric tons (18 percent) during fiscal 1987. This was the first rise for value since 1984 and the first for volume since 1980. The United States captured a larger share of growing world markets for grains, cotton, and soybean meal, helping to mark the end of a 6-year decline in export volume.

But, it was cotton, livestock products, and horticultural products that boosted value. Lower Government loan rates, the Export Enhancement Program, and 2 years of the dollar's steady decline on many foreign exchange markets get much of the credit for the turnaround.

This is good news to farmers after the weak export performance from the early 1980's through fiscal 1986. The close attention paid to farm export gains shows the importance of world trade to U.S. farmers.

However, this year's recovery was only a small step toward regaining the ground lost during the first half of the 1980's. And benefits of this year's gain are greater for some farmers than for others.

Fiscal 1987 saw most prices fall, in some cases enough to offset increased volume. U.S. grain exports climbed 16 million tons over fiscal 1986, but slipped \$409 million in value. Similarly,

### What Did Black Monday Do to Agriculture?

The stock market plunge on October 19, subsequent gyrating stock prices, and related turmoil in financial and foreign exchange markets have clouded the general economic climate for 1988. While industrial production, employment, and real GNP showed robust growth in the early fall, some analysts have suggested that a recession is likely for 1988.

It is too early to assess accurately the chances of a recession, but it is likely that economic growth will be lower in 1988 than expected a few months ago.

Somewhat surprisingly, however, agriculture may find itself facing better credit terms and stronger export demand in 1988, even if these are accompanied by slightly weaker domestic demand. The agricultural economy may improve because the earliest effects of the stock market decline have included a sharp drop in interest rates and the value of the dollar.

The possibility that the economy will sag into recession in 1988 rests on consumer spending. The decline in stock market wealth is likely to lead to some decline in consumer spending. That alone probably would not bring on a recession.

A consumer slowdown, however, could reduce business confidence, bringing down capital spending and further reducing overall activity. The confidence factor is intangible and hard to assess, but if enough confidence is lost, a recession is more likely.

Lower interest rates could offset the loss of confidence, though. In the wake of Black Monday, the Federal Reserve increased the liquidity of the financial system to avoid a more general crash. Interest rates immediately dropped by nearly a full percentage point.

If lower rates continue, they ought to prop up interest-sensitive sectors of the economy—housing, consumer durables, and business plant and equip-

the volume of oilseed and product exports rose 8 percent to 30 million tons, but value was virtually unchanged.

Cotton was an exception, as a 171-percent increase in volume boosted value \$741 million, or 109 percent.

ment. Further, lower interest rates could shore up business confidence. On balance, it is hard to predict how much the expansion effects of falling interest rates will offset the contraction effects of lower consumer wealth.

Many analysts trace the stock market decline to concerns about the Federal budget and foreign trade deficits. Even though the budget deficit decreased by over \$70 billion from fiscal 1986, some analysts warned that the deficit would worsen again in 1988 without more stringent action.

The stock market decline prompted reconsideration of the fiscal 1988 budget, which has introduced fiscal policy uncertainty. Some analysts warned that too little action to improve the deficit could send the stock market into a further decline. However, if Federal spending is reduced too much, or if taxes are increased too much, economic activity is likely to decline in the short term.

The falling dollar has also added uncertainty to the economic policy outlook. Lower interest rates in the United States could cause capital to leave the country in search of a higher return elsewhere, leading to a drastically lower dollar. When capital leaves, domestic interest rates are forced up—unless the Federal Reserve supplies more credit.

If too much credit is supplied, however, inflation could be rekindled. The Federal Reserve is caught between two competing ends: defending the dollar (or making sure that the decline is orderly), and maintaining lower interest rates.

With so many complicating factors, a clear picture of the economic landscape for 1988 has yet to emerge. More improvement in the Federal budget deficit and a better trade picture (September's merchandise trade deficit was the second consecutive monthly improvement) could keep interest rates in their current range and allow the dollar to stabilize. In that event, the economy is likely to continue to expand throughout the coming year. *[R. M. Monaco (202) 786-1283]*

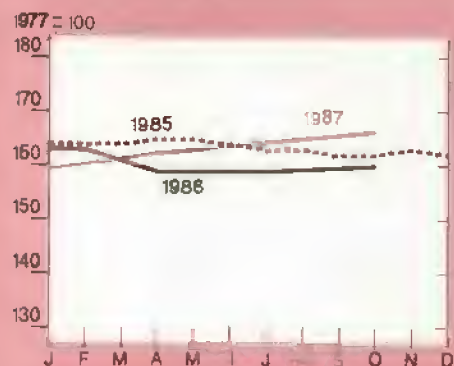
But even this impressive gain left cotton's value well below other recent years.

Most of fiscal 1987's increase in value stemmed from nonbulk exports. Horticultural and livestock product exports rose \$1.2 billion. Remarkably,

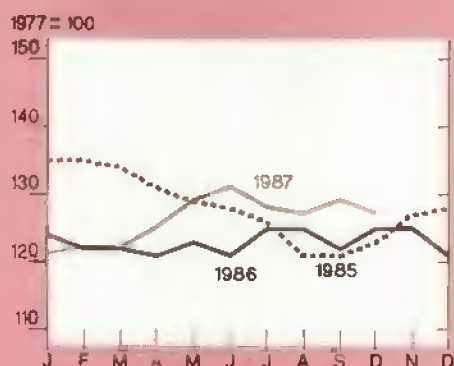


# Prime Indicators of the U.S. Agricultural Economy

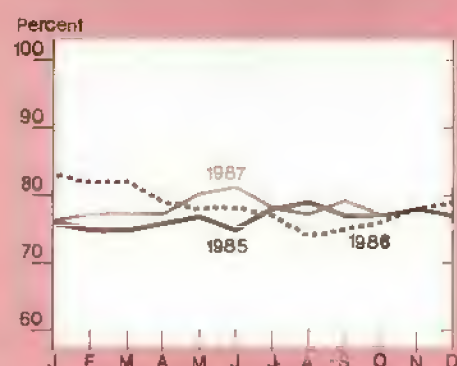
Index of prices paid by farmers<sup>1</sup>



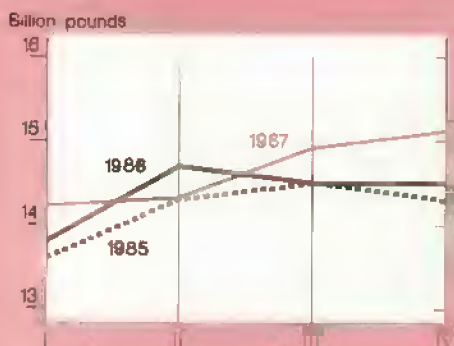
Index of prices received by farmers<sup>2</sup>



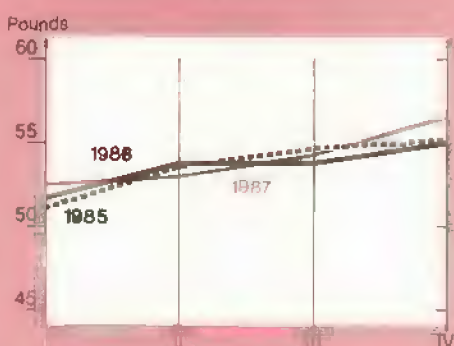
Ratio of prices received to prices paid



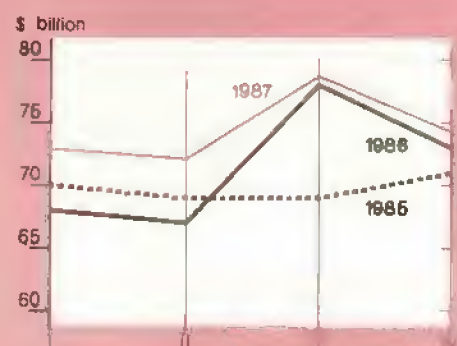
Red meat & poultry<sup>3</sup>  
production



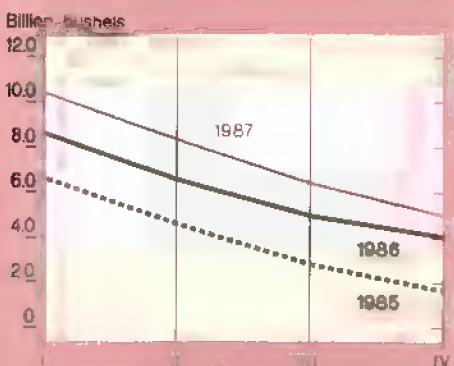
Red meat & poultry  
consumption, per capita<sup>3,4</sup>



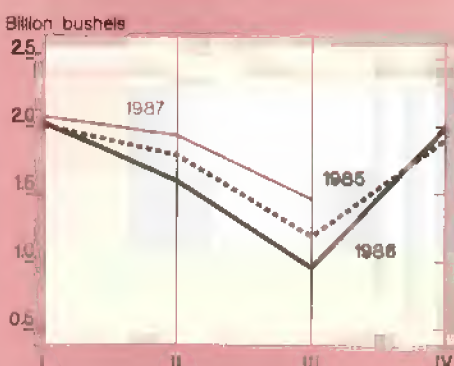
Cash receipts from  
livestock & products<sup>5</sup>



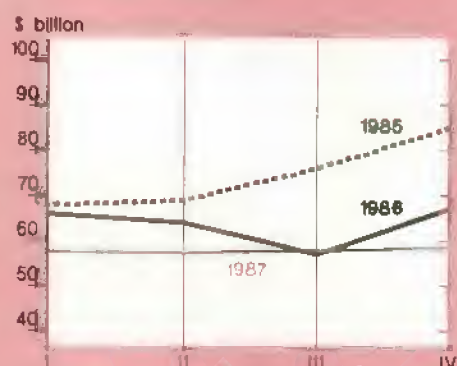
Corn beginning stocks<sup>6</sup>



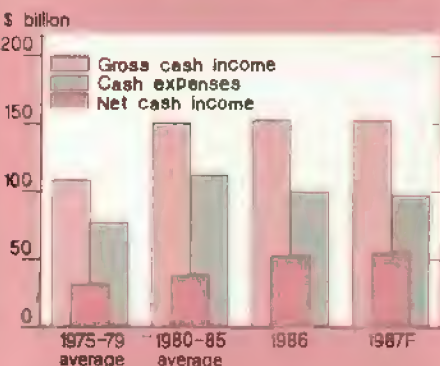
Corn disappearance<sup>6</sup>



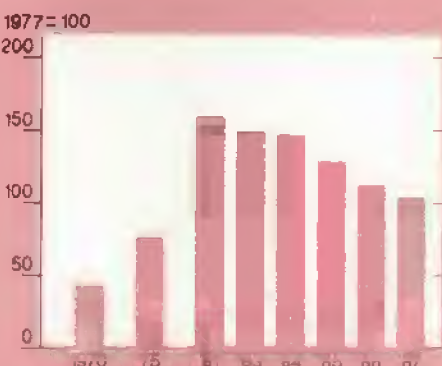
Cash receipts from crops<sup>6</sup>



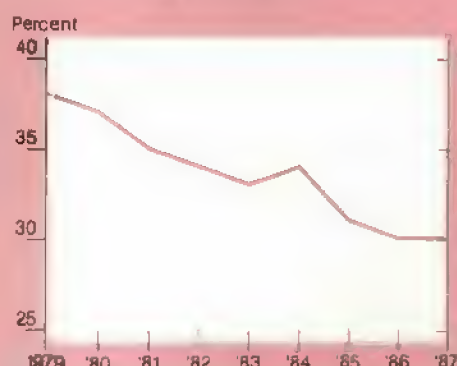
Farm net cash income



Farm real estate values



Farm value/retail food costs



<sup>1</sup>For commodities and services, interest, taxes and wages. Beginning in 1986, data are only available quarterly. <sup>2</sup>For all farm products.

<sup>3</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>4</sup>Retail weight <sup>5</sup>Seasonally adjusted annual rate

<sup>6</sup>I=Dec.-Feb.; II=Mar.-May; III=June-Aug; IV=Sept.-Nov.

U.S. agricultural exports excluding grains, oilseeds, and cotton reached a record high of \$11 billion. High-value exports generally enjoyed higher prices as well as growing volume, repeating their relatively strong performance of the last few years.

One hears the phrase "the internationalization of agriculture." For the United States, it means that the sun never sets on consumers of U.S. farm products, nor on the farmers in other countries that supply competing products into the same export markets. It also means that export earnings are a sizable part of U.S. farmers' cash receipts.

Export value at the ports for 1987 is about 18 percent of cash receipts at the farm, compared with last year's 17 percent. But this is a small gain when one recalls that the share of cash receipts from exports was as high as 30 percent back in 1981, at the peak of export expansion.

It was that expansion during the 1970's that internationalized U.S. agriculture. Export gains then were driven by bulk commodities. World demand for grains and oilseeds soared, and prices rose in tandem with export volume.

What made most people conscious that agriculture had become internationalized was the drop from 1981's 30 percent to last year's 17 percent and the accompanying difficult financial times for farmers. U.S. farmers have the capacity to supply large quantities of agricultural products to world markets. This capacity has been underutilized so far during the 1980's, particularly for bulk commodities. Unfortunately, foreign demand for these commodities remains weak, and the value of bulk exports rose only 2 percent in fiscal 1987.

What once was a sharp and well understood distinction—domestic and foreign—has become blurred for farmers whose economic health depends so heavily on exports. It is not so much "we" and "they" anymore, but "us." Events that once seemed remote and foreign to U.S. farmers, such as a monsoon in Asia, a recession in Europe, a crop failure in the USSR, or hunger in Africa, take on great importance and have immediate and noticeable financial consequences.

Like the so-called butterfly effect in weather forecasting, the internationalization of agriculture has made it harder to forecast farm prices and incomes. The butterfly effect is a picturesque way of saying that an unnoticed and seemingly unrelated flap of a butterfly's wing can set up a disturbance in the motion of the air that, after a series of repercussions affecting air streams, completely changes the weather. The butterfly effect makes weather inherently unpredictable. And the internationalization of agriculture makes farm income and price forecasting more uncertain than it was before the 1970's.

Farmers have dealt with a blurring of once seemingly clear dichotomies before. Look at what has happened to the distinction between rural and urban during the past 25 years, or to the distinction between farm and nonfarm during the past century.

Back in Jefferson's day, more than 90 percent of the people lived on farms. In those days, farm life was idealized: It was believed to produce better people who were more honest, independent, democratic, and religious than city people. Farmers were an independent lot who saw themselves as little affected by events away from the farm, in the cities, or abroad. Now the lives of farmers and city people are mingled and no longer seem to be so very different.

The 1924 Annals of the Academy of Political and Social Science predicted that because of the increasing use of the automobile, "farm to city migration will be checked: farmers can visit the city any time." But after World War II, not only did most farmers leave the farm, but the city moved its roads, jobs, and ways of doing things right out into the country and urbanized a large segment of rural America.

There are still some important distinctions to make between domestic and foreign, farm and city, rural and urban. But for farmers the distinction between domestic and foreign is becoming as blurred as the distinctions between rural and urban, or farm and city, already are. [Clark Edwards (202) 786-3313 and Stephen McDonald (202) 786-1620]

## LIVESTOCK OVERVIEW

Shoppers will have plenty of meat at reasonable prices for the holiday season. Record production of turkeys and broilers and increased pork are outweighing declining beef supplies.

Grain and soybean meal prices seem to have bottomed out and may increase slightly, putting mild upward pressure on production costs. This, combined with greater downward pressure on product prices, indicates reduced profits, particularly for hog and poultry producers, in 1988.

Total meat supplies will again be up sharply in 1988. Larger output from hog producers, as well as continued poultry increases, could push meat supplies to another record. The recent volatility in financial and commodity markets has caused economic uncertainty and resulted in weaker prices. The implications for livestock and poultry supply and demand for the next several months are unclear, but producers and consumers likely will be cautious. The larger meat supplies next year will dampen prices received.

Recent price declines in the cattle and hog markets paralleled declines in the financial markets. While most of the commodity market drop reflects large fed beef and pork production, some may be associated with turmoil in the financial markets.

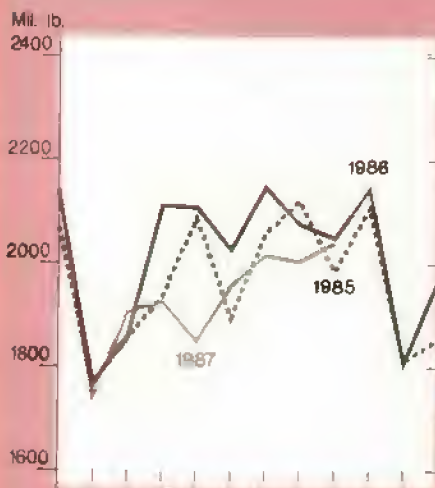
Investors with holdings in both the commodity and stock markets may have been forced to liquidate some commodity holdings to cover stock losses. This liquidation, coupled with general unease over the economy, contributed to a reduction in commodity investments generally, and in livestock futures particularly.

Livestock and poultry are major contributors to the increased value of U.S. agricultural exports in fiscal 1987. Export value reached \$27.9 billion, a 6-percent increase over 1986. Livestock, dairy, and poultry exports grew 15 percent to a record \$5 billion, accounting for 42 percent of the value increase for 1987. Beef exports to Brazil and Japan rose, and sales of poultry products under the Export Enhancement Program were stronger.

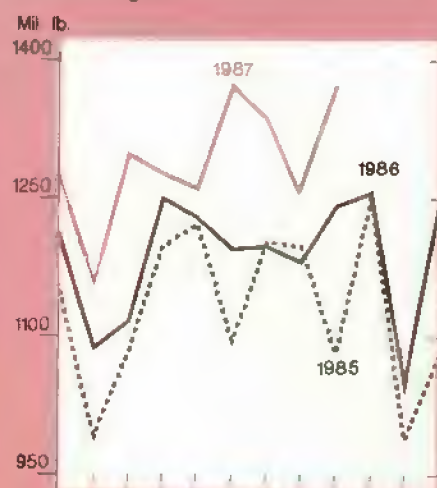


# Production of Livestock and Products

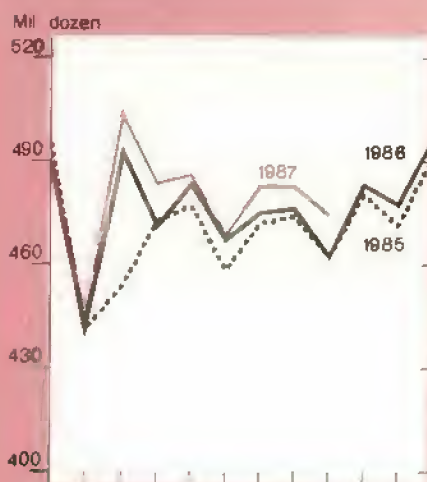
Commercial beef production



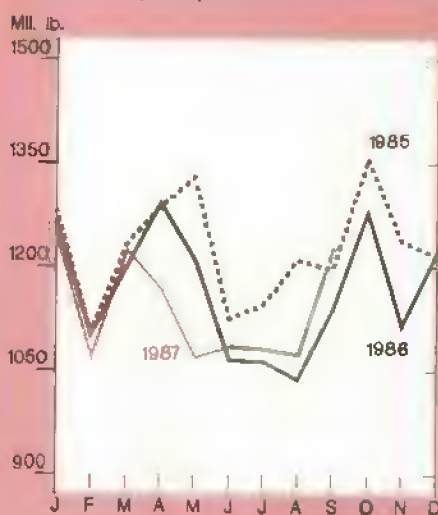
Broiler slaughter<sup>1</sup>



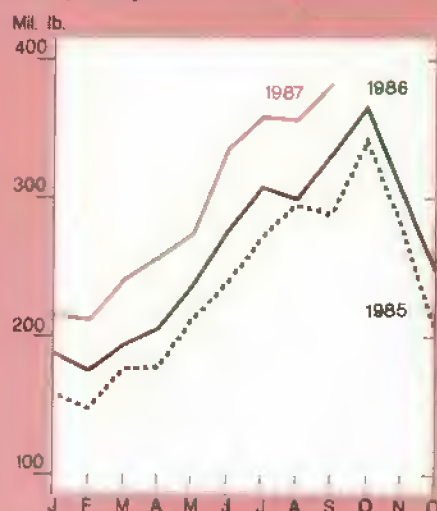
Egg production



Commercial pork production



Turkey slaughter<sup>1</sup>



Milk production



<sup>1</sup>Federally inspected slaughter, certified.

## Fourth-Quarter Cattle Marketings May Be 4-5 Percent Higher

Inventories of cattle on feed in the 13 quarterly reporting States were up 10 percent from a year earlier on October 1. The surge in feedlot numbers resulted from higher placement rates during the summer in all of the surveyed States except Illinois.

Positive returns continued in spite of large fed cattle marketings during July-September. Placement rates again were large; producers filled pen space as soon as it became available.

The October 1 survey put fourth-quarter marketing intentions at 5.5

million head, 3 percent higher than the same quarter in 1986. Marketings may rise even higher, to 4 or 5 percent, as feedlot operators attempt to move cattle ahead of the large poultry and pork supplies which are expected to hit the market early in 1988.

Increases in fed cattle marketings and higher replacement rates have continued to draw down feeder cattle supplies outside feedlots, particularly heavier yearlings. In addition, operators have pulled lighter-weight cattle into the feedlots. The number of lighter-weight steers on feed October 1 increased 87 percent from a year earlier.

While the lighter cattle represent only 5 percent of the total inventory on feed, their movement into lots now will mean a smaller inventory to draw from next year. Feeder cattle supplies outside of feedlots on October 1 were the lowest since the early 1960's.

Cattle on feed in the seven monthly reporting States on November 1 were 11 percent above a year earlier and the largest for this date since 1978. While placements in October were 8 percent above a year earlier, marketings were 6 percent above October 1986 and the largest since 1978. Feedlot inventories are large, but cattle feeders are marketing animals promptly. This trend will need to continue through at least next February

to avoid a backlog of unmarketed cattle and weaker prices.

For the coming year, fed cattle marketings are expected to decline only marginally in spite of the declining supply of feeder cattle. Most of the expected declines in 1988 slaughter will come from reduced cow and non-fed steer and heifer slaughter. These cutbacks, as well as a small decline in fed cattle slaughter, could push beef production down another 4 percent in 1988, following the 4-percent decline in 1987.

### **Hog Prices Drop**

The hog market is in the midst of its steepest seasonal decline in many years. Large hog slaughter, heavy slaughter weights, and a lack of seasonal strength in wholesale ham prices are lowering carcass values.

Slaughter since the first of October has been 10 to 11 percent above a year ago, and weekly kills have reached the highest levels since November 1984. The average weight of barrows and gilts at the 7 major markets has been about 5 pounds heavier than a year ago. Average prices have dropped about \$12 per cwt since the first week of October, to near \$40.

As slaughter rates pull back from seasonal highs established in November, hog prices may find support in the lower \$40's. Still, price advances may be limited through the winter as pork supplies remain large and intense competition from poultry meat continues. Barrow and gilt prices in first-quarter 1988 are projected to average below the current quarter. (See the Commodity Spotlight on pork supplies.)

### **Broiler Output Is Increasing Sharply**

Broiler production for third-quarter 1987 was nearly 10 percent greater than a year earlier. Broiler chicks hatched during August and September were more than 7 percent above the same period last year. Eggs in incubators on October 1 were up 4 percent. These indicators suggest that fourth-quarter production likely will be 8 percent greater than last year.

Second-half broiler production is estimated to be nearly 9 percent greater than a year ago, indicating that total

1987 production is more than 8 percent above 1986. The broiler hatchery supply flock is predicted to be 8 percent larger in April 1988 than in April 1987, indicating that production will continue to expand. A 5-percent gain in production is forecast for 1988, with most of the increase in the first half.

The 12-city composite price for whole broilers averaged 43 cents a pound in October, down almost 3 cents from September and 6 cents from October 1986. The third-quarter 1987 price was down 4 cents from last year. Prices for October-December could average 42 to 46 cents, down from 56 last year. Broiler prices are expected to average 40 to 46 cents in first-quarter 1988, and stay near there for the rest of the year.

### **Turkey Production May Run 17 Percent Above Last Year**

Federally inspected turkey slaughter in January-September was nearly 19 percent above the same period in 1986. Second-half production may be up almost 16 percent over a year earlier, so total 1987 production is expected to be up 17 to 18 percent. In 1988, production could slow to an increase of 6 to 7 percent as producers' returns diminish.

Cold storage holdings on October 1, at 641 million pounds, were up 25 percent from 1986. These record stocks are expected to hold prices below a year earlier through the fourth quarter and into first-quarter 1988.

The Eastern Region hen turkey price for the third quarter was about 56 cents per pound, down from 80 cents last year. October prices averaged 55 cents, down from 83 the previous year. Fourth-quarter prices are expected to average 48 to 52 cents, compared with 78 cents in 1986.

Prices during 1988 are expected to average from 51 to 57 cents a pound. First-quarter prices are expected to average 45 to 51 cents as larger-than-normal beginning stocks are sold off. Slightly higher feed costs and large pork supplies are expected to keep net returns near breakeven in the fourth quarter.

### **Egg Prices Probably Stable in '88**

Egg prices for 1987 probably will average below 1986 because of expanding

production. While production is keeping pace with population increases, declining per capita consumption is pushing prices lower.

Output was 1.4 percent higher in January-September than the same period in 1986, and will total 1.5 percent higher for all of 1987. Production in 1988 is expected to be down almost 1 percent from 1987, in response to returns near or below breakeven in first-half 1988.

In New York, cartoned grade A large eggs in the third quarter averaged 63.5 cents per dozen, down from 73 cents a year before. The October price was 60.2 cents, down from 69 cents last year. Prices for the fourth quarter likely will average 62 to 66 cents. However, egg prices for 1988 are expected to average 60 to 66 cents, near 1987's average of 62 to 63 cents. First-quarter 1988 prices will mirror the year's forecast.

### **Milk Output May Gain 1-3 Percent Next Year**

In late September and early October, wholesale prices of butter and American cheese tumbled below even the prices of the heavy spring milk production season. Just before this counter-seasonal decline, market conditions appeared fairly steady.

Slaughter under the Dairy Termination Program (DTP) had ended, and milk production was showing a steady, gradual recovery. Growth in commercial use was strong and stable, and commercial stocks had returned to the low levels of a year before. Wholesale prices were up seasonally across the board, and Government purchases had slowed to a trickle.

The drop in butter and cheese prices may have represented in part an over-reaction to some softness in the markets, compounded by the October 1 cut in the support price for marketing-grade milk. The decline was aided by a surge in milk output and a weakening in commercial use.

Preliminary estimates indicate that while milk production in September increased 2 percent from a year earlier, commercial use decreased by about 2.4 percent. The dominant question now is whether the decline in commercial use is an ominous sign for



1988 or just an aberration. The cause of these price drops should become clearer in coming months.

The 1988 supply-demand balance for dairy products is not expected to be much different from this year's, although the level of the support price on January 1 remains a key question. Milk production probably will rise 1 to 3 percent, reversing the decline of a little over 1 percent in 1987.

Milk per cow probably will post another strong gain, while cow numbers may not change much. Favorable retail dairy prices, combined with continued heavy promotion, probably will generate another 1- to 3-percent rise in commercial use, following this year's 2- to 3-percent gain. [Lee Christensen (202) 786-1830]

**For further information, contact:** Kevin Bost, hogs; Mark Weimar, broilers, turkeys, and eggs; Steve Reed, cattle; and Sara Short, dairy.

## FIELD CROP OVERVIEW

The Northern Hemisphere harvest is nearing completion and, with the notable exception of rice, foreign crops are large. Wheat crops in most major producing areas were big, although expectations for the EC crop have diminished and Soviet production will be sharply lower.

The total foreign corn crop in the hemisphere is likely to be little changed from last year's large harvest. China's increased output will offset reductions elsewhere. But, the sorghum crop will be somewhat smaller because of a shortfall in India. Barley output is higher, mainly because the Soviets expanded area after major losses of winter wheat.

Oilseed crops are much larger, with more area planted, particularly in the European Community. The cotton crop also increased, from greater area and yields.

Rice production is showing a big decline, since drought cut area and yields through much of southern Asia. Because of the drought, the foreign rice crop, most of which is produced in the Northern Hemisphere, is expected

to be down 5 percent (nearly 10 percent if the gain in China's crop is excluded).

## Southern Hemisphere Still a Question Mark

The Southern Hemisphere's contribution to 1987/88 crops is uncertain because planting is not complete. Even for crops now being harvested, there is some uncertainty as to area and yield. This is particularly true in Australia, where the extent of the shift from wheat to other crops and livestock, and the degree to which farmers are leaving agriculture, are not clear.

Soybean area in the Southern Hemisphere is another question mark. Partly because of the rising attractiveness of soybeans in relation to corn, oilseed acreage in both Argentina and Brazil is projected to increase. Also, large stocks from last year's record corn harvest are contributing to the area shift in Brazil from corn to soybeans. Soybean area in these two countries is expected to grow by 10 percent, and production in South America as a whole is forecast at a record. Larger-than-anticipated area or yields could mean a foreign soybean crop bigger than the 49-million-ton record now projected.

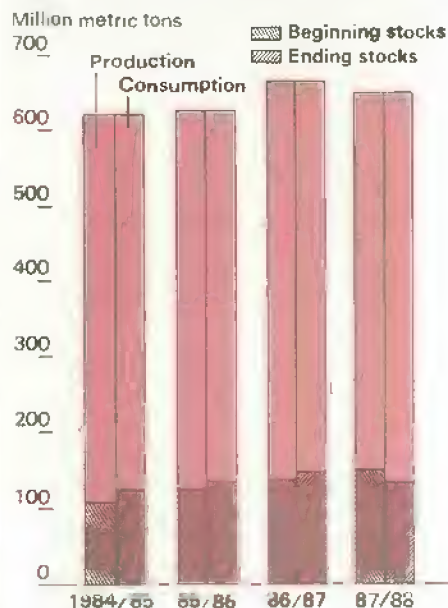
Southern Hemisphere developments will have some impact on the cotton supply. Higher world market prices will tend to increase the plantings that are now underway. Larger cotton acreage is expected in Argentina, Australia, and Brazil, but the size of the gains is not yet certain.

## U.S. Harvests Early

U.S. corn and soybean harvesting through October was 2 to 3 weeks ahead of normal, as favorable weather prevailed in the Midwest. By October 18, the soybean harvest in Iowa and Illinois was virtually complete; the corn harvest had advanced to 91 percent in Illinois and to 80 percent in Iowa. The major producing States had harvested over three-quarters of their corn and soybeans, compared with a norm of about two-fifths.

The early harvest contributed to a bigger and better U.S. crop than would have been the case with less favorable weather. Abandonment of area was minimal. Yields improved because losses due to shattering, animals, and pests were reduced. The quality of the crop was enhanced by lower moisture levels, and drying costs were less than last year.

## Increased Consumption To Lower Wheat Ending Stocks for 1987/88



Dry, cool fall weather also accelerated harvesting of sorghum, rice, cotton, and most other crops, but not as dramatically as for corn and soybeans. Planting of winter wheat is ahead of normal except in the Pacific Northwest, where drought has delayed planting and retarded emergence. Early wheat planting may be favorable if a strong stand emerges that is less susceptible to bad winter weather, but the dryness could stress the wheat crop if timely rains do not develop.

## Wheat Trade Up

Although the world's 1987/88 wheat crop is smaller than last year, record carryin stocks mean that available supplies are second only to last year's all-time high. World utilization is continuing to expand. But growth this year is limited by a drop in world feed use caused by lower Soviet wheat production.

Outside the USSR, wheat feeding is about the same as last year. World trade in wheat is growing; exporter supplies are down from 1986/87 but still ample. This has limited gains in world wheat prices from last year's depressed levels. Prices for quality wheat are stronger because of smaller harvests of Durum and other quality wheats in the United States, Canada, and the EC. However, some recent sales of EC feed-quality wheat have been priced as little as \$60 per ton.

While world wheat trade is growing 7 percent in 1987/88, U.S. exports are forecast to total 37 million tons, an increase of 30 percent. Sales by the end of October were nearly 28 percent ahead of last year. The United States has already shipped over 4 million tons of wheat to the Soviets this marketing year; no sales were on the books at this time last year.

On November 9, USDA announced an offer to sell 2.4 million metric tons (88 million bushels) of wheat to the Soviet Union through the Export Enhancement Program (EEP). The sales price and the EEP subsidy will be determined by the type of wheat purchased. U.S. wheat exports are now expected to rise to 1,350 million bushels for 1987/88.

Signup for the 1988 wheat program is delayed until the resolution of Government budget uncertainties. Enrollment is not likely to begin until a decision on Gramm-Rudman limits to Government spending are made.

#### ***Tight Supply Limits Rice Movement***

World rice trade in 1987/88 will be the smallest in the last decade, despite lower production and consumption throughout southern Asia. Trade will be limited by small long-grain rice crops in the United States and Thailand, normally the world's two largest exporters. Thailand's rice crop is down by 17 percent from last year's poor outturn. U.S. production is off 4 percent at the same time that carryin stocks are down 29 percent.

Thailand is expected to export only 1.9 million tons of rice during calendar 1988, 54 percent below the average of the previous 5 years. U.S. shipments for the same period are expected to total 2.6 million tons, 13 percent above 1987.

The sharp runup in rice prices will limit import demand, most notably in the more price-sensitive African markets, and shift buyers toward wheat and other grains. Since U.S. export programs are set in dollar terms, they will finance a smaller volume of rice trade than in the past.

In the United States, the average market price for rice in 1987/88 may increase over 70 percent. However, the adjusted world price may average less than the U.S. loan rate of \$6.84 per

cwt. Stocks on August 1, 1988, are forecast at 30 million cwt, the minimum carryin targeted in the 1985 Farm Act. However, 1987-crop program costs are forecast to exceed \$750 million, because of continued deficiency payments and net marketing loan outlays.

In October, USDA requested comments on possible provisions for the 1988 rice program. Supply and utilization analysis and program outlays were published for alternative 1988/89 acreage-reduction programs. Despite increasing prices and low stock levels, program costs are expected to remain large.

Program costs rise as the set-aside requirement for the acreage reduction program is reduced, since more rice eligible for deficiency payments is produced. If the 1988/89 acreage limitation is maintained at the legal maximum of 35 percent, the reduced supply and higher prices could limit 1988-crop program costs to about \$300 million. However, this reduction would likely reduce stocks below the minimum target of 30 million cwt.

USDA forecasts indicate that a 25- to 30-percent acreage limitation is the maximum that would maintain rice stocks at 30 million cwt. Program costs for a 25-percent acreage reduction are projected to be about \$500 million. If the set-aside were reduced to 15 percent the program likely could cost nearly \$700 million.

#### ***Coarse Grain Markets Continue Highly Competitive***

The combination of near-record foreign production of coarse grains and strong price competition from feed wheat is expected to result in only a marginal increase in world coarse grain trade in 1987/88, despite continued low prices.

Foreign barley production this year is a record, with the best Soviet crop in a decade and good harvests in Canada and the EC. And Saudi Arabia, the largest market, is limiting import subsidies after last year's record imports. Soviet imports are also dropping, but the impact on world barley trade will be cushioned by larger imports in Eastern Europe and other countries.

The foreign corn crop is expected to approach last year's record, and world carryin stocks are also a record. Despite continued low prices and an expected 2.7-percent gain in foreign utili-

zation, world trade will grow only slightly. Large barley and feed wheat supplies are partly responsible for the slow growth of corn trade.

As of the end of October, U.S. corn sales for 1987/88 were running 30 percent ahead of last year, and exports during 1987/88 are forecast to gain 10 percent to 43 million tons. The United States is gaining market share because of tight competitor supplies, particularly in Thailand, Argentina, and South Africa.

U.S. corn prices during October were up from last year. Prices remained strong despite harvest pressure and a volatile stock market. Reasons include the following:

- farmers expecting higher prices waited to market their crops,
- lower tax rates after January 1, 1988, encourage farmers to wait until then to sell their harvest,
- the September 1 stocks report indicated smaller-than-expected supplies,
- feed demand is strong, and
- exports have continued strong.

#### ***Rapid Pace for U.S. Soybean Exports***

Oilseed markets are facing large supplies and only modest growth in demand. Soybeans and products are also encountering competition from large supplies of other oilseeds, notably rapeseed, and world trade in both soybeans and soybean meal may drop somewhat in 1987/88. The EC, the world's largest market for soybeans and meal, will import less this year because of record domestic crops.

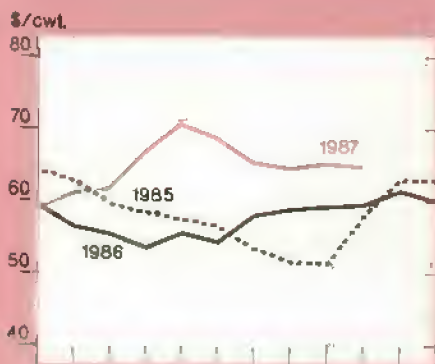
U.S. exports of soybeans are presently running well ahead of last year's pace; Argentina and Brazil are largely out of the market for beans until their new crops are available next spring. If their crops are as large as expected, the pace of U.S. sales and shipments will drop sharply, and U.S. soybean exports for the full 1987/88 year will be slightly below those of last year.

Argentina's soybean and product export availabilities will be boosted by a very large sunflowerseed crop. U.S. soybean meal sales are currently below last year's, and the 1987/88 export total is forecast to drop from last year. But, recent large sales to the

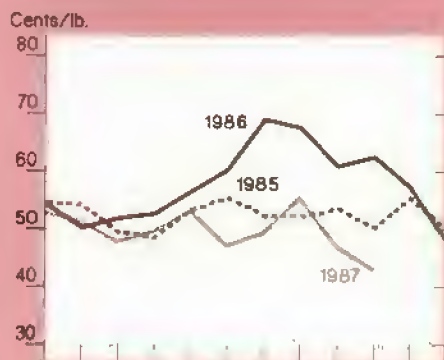


# Commodity Market Prices

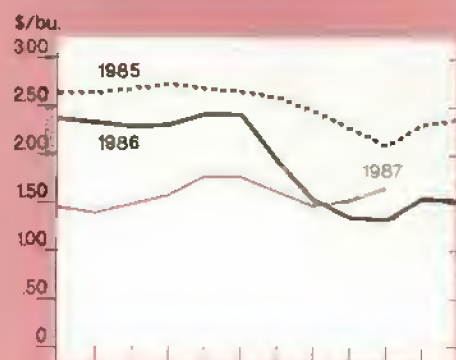
Choice steers, Omaha



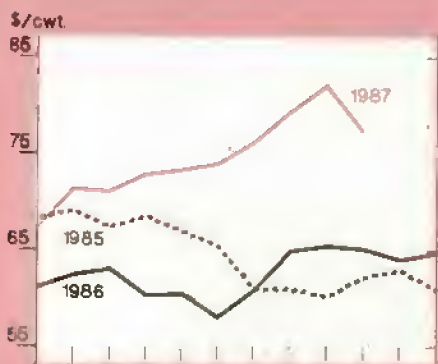
Broilers, 12-city average



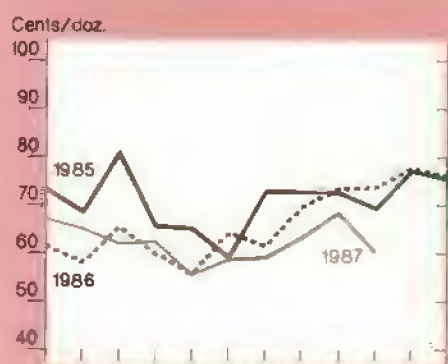
Corn, Chicago<sup>3</sup>



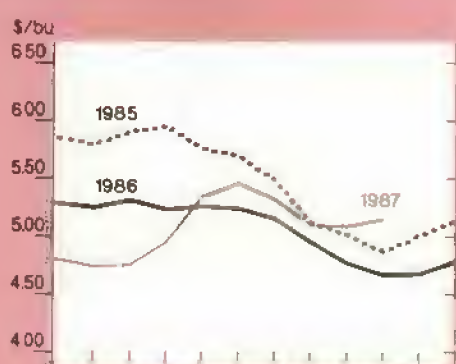
Feeder cattle, Kansas City<sup>1</sup>



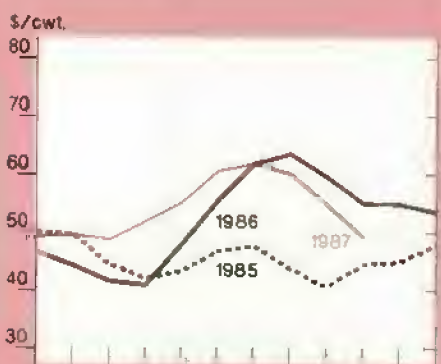
Eggs, New York<sup>2</sup>



Soybeans, Chicago<sup>4</sup>



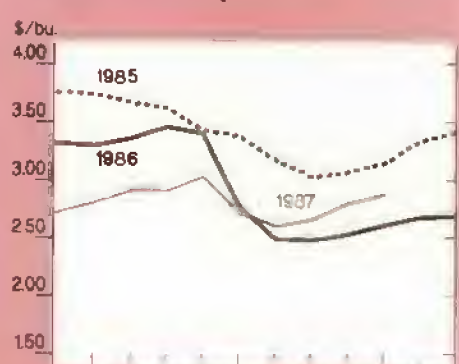
Barrows and gilts, 7 markets



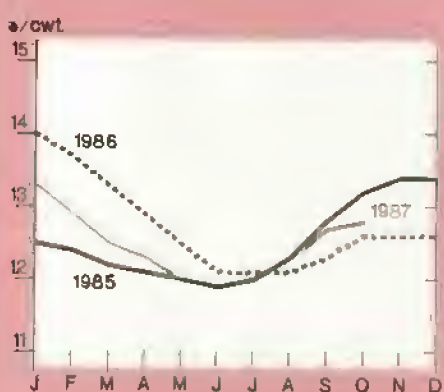
Rice (rough), SW Louisiana



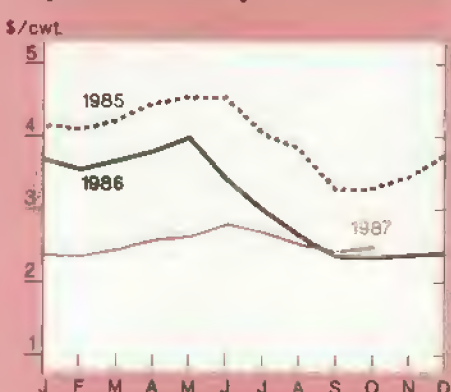
Wheat, Kansas City<sup>5</sup>



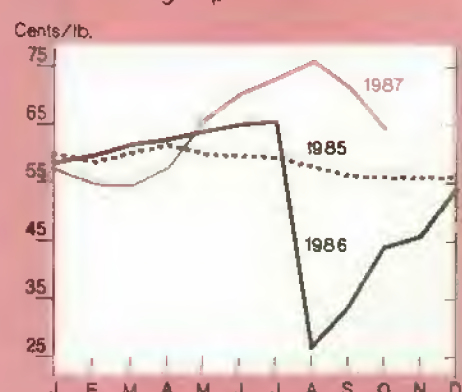
All milk



Sorghum, Kansas City



Cotton, average spot market



<sup>1</sup>600-700 lbs., medium no. 2. <sup>2</sup>Grade A Large.

<sup>4</sup>No. 1 Yellow.

<sup>3</sup>No. 2 Yellow.

<sup>5</sup>No. 1 HRW.

USSR could improve U.S. export prospects, while higher prices could dampen export movement. The USSR last bought U.S. soybean meal in 1979.

Farm prices for soybeans during harvest were up from last year. The \$4.77 loan rate acts as a floor on soybean prices, and the release of CCC inventory limits increases. Prices remained strong, at or near levels that trigger the release of CCC stocks, because of small free stocks of only 39 million bushels, decreased marketings as farmers waited for higher prices, and strong demand.

The average market price for soybeans during 1987/88 is forecast at \$4.85-\$5.35, reflecting slightly reduced production and higher exports. Ending stocks are expected to total 375 million bushels, down 14 percent from 1986/87 and only 19 percent of expected annual use.

#### **Continued Gains in World Cotton Use**

Cotton production in 1987/88 will be below projected world consumption by over 5 million bales, bringing world ending stocks to the lowest since 1983/84. The tightening of supply pushed up prices, which during October averaged 48 percent above a year earlier.

Despite higher prices, foreign cotton consumption (excluding China) in 1987/88 is again up, although the small gain projected for this year is well below the pace of the last several years. The slowdown in consumption growth is contributing to a small drop in world cotton trade, but the 24.4 million bales in trade projected for the year is second only to the 1986/87 record.

This season's domestic cotton yield estimate was raised sharply to a record 671 pounds an acre, placing the 1987/88 crop at 13.94 million bales. The 600,000-bale increase in the supply estimate from October was offset partially by a 300,000-bale increase in expected total use, placing 1987/88 carryout at 4.1 million bales, just above the 4-million-bale target set by the 1985 Farm Act.

Domestic mill use of cotton, forecast at 7.8 million bales in 1987/88, continues

strong. In the past, recessions have caused a decline in mill use. Recent dramatic declines in the financial markets may have raised concern over the sustainability of these mill use levels, contributing to declines in the cotton price.

Provisions announced for the 1988 upland cotton program include a loan rate of 51.8 cents per pound and a target price of 77 cents per pound. A 12.5-percent acreage reduction program will be in effect for 1988, in contrast to the 25-percent reduction required in 1987. No paid land diversion will be offered.

The Plan B marketing loan program will be in effect again in 1988/89. Under Plan B, the loan repayment rate for 1988-crop upland cotton under loan is equal to the lower of the loan rate or the adjusted world price in effect during the week the loan is redeemed. In 1986/87, Plan A fixed the loan redemption rate at 80 percent of the loan rate. Announcements concerning signup dates for the 1988 program and any advanced deficiency payments will be made later.  
[Frederic Surls (202) 786-1691 and Ed Allen (202) 786-1840]

#### **HIGH-VALUE CROP OVERVIEW**

##### ***Small Navel Crop Pushes Fresh Orange Prices Higher***

Unusually hot weather during May and June caused excessive fruit drop among California's Navel orange trees, sharply reducing this season's harvest. Consequently, U.S. fresh orange prices likely will exceed those of last winter.

California's Navel oranges usually account for 80 percent of all fresh early, midseason, and Navel orange sales, so the size of the California crop typically affects the fresh orange price more than does the size of the total U.S. crop. The November 1 forecast for California Navels stood at 26 million boxes, down 25 percent from last year.

The production forecast for all oranges on November 1, stood at 183.4 million boxes (7.86 million tons), up about 1 percent from last year. Florida's production, expected to rise 9 percent over last season, more than offset an estimated 16-percent drop in California's output.

Texas continues to recover from the 1983 freeze, which virtually destroyed its citrus production. Texas' 1987/88 output forecast is 1.35 million boxes, compared with 875,000 last season and no reported production in 1984/85.

##### ***Strong Demand Propelling Fresh Vegetable Output, Use***

Driven by strong demand, per capita consumption of ten major fresh vegetables rose from 73.3 pounds in 1975 to 89.9 in 1986. Fresh tomatoes and onions led the growth. From 12.0 pounds per person in 1975, tomato consumption rose to 17.2 pounds in 1986, while onion consumption rose from 13.4 to 17.9 pounds. Important gains also took place in broccoli and cauliflower consumption.

Much of the growth occurred during the last 5 or 6 years. Growing awareness of the importance of fresh produce in the diet, higher disposable incomes, and greater popularity of salad bars at restaurants all contributed to the rise.

Total harvested area of fresh vegetables in 1987 expanded 6 to 8 percent above last year's 1.1 million acres. Acreage of the seven major fresh vegetables for fall harvest rose 3 percent, with growth mostly in Florida tomatoes and California lettuce. Florida's tomato growers, encouraged by good prices last fall, expanded their acreage by 12 percent this autumn. California's lettuce acreage for harvest rose 7 percent from last fall.

##### ***Less Expensive Dollar, TEA Boost Horticultural Exports***

Foreign import demand responded to the lower value of the dollar and the Targeted Export Assistance (TEA) program in 1987, boosting U.S. horticultural exports. Export volume, forecast at 3.0 million metric tons in fiscal 1987, will exceed the previous year by about 9 percent. Value of the exports will rise nearly 20 percent, to an estimated \$3.2 billion. The heightened exports, along with strong domestic demand, pushed prices for fruit and vegetables higher in 1987.

Fresh grapefruit sales to the EC, Japan, and other East Asian and Pacific countries led the export growth. Grapefruit exports totaled 341,081 metric tons as of August 1, up 33 percent over the previous season. Im-



portant export gains also occurred for fresh avocados, cherries, lemons, oranges, and fresh and processed onions and potatoes.

### ***Rising Production Creates Sugar Policy Dilemma***

Rising domestic production and sluggish demand growth may compel changes in U.S. sugar policy. The 1985 Food Security Act set a loan rate of 18 cents per pound, raw value, for domestically produced sugar. The Act also mandates that the sugar program be operated at no cost to the Federal Government by keeping market prices high enough so that sugar loan collateral will not be forfeited to the Commodity Credit Corporation. The Administration establishes annual import quotas to operate the sugar program and to protect domestic sugar producers from imports of low-priced world sugar.

U.S. prices made sugar more profitable than most competing crops, and domestic production expanded rapidly after 1985. Output jumped from 5.8 million short tons, raw value, in fiscal 1985 to 6.7 million in 1987, and it is forecast at 7.1 million for 1988.

High fructose corn syrup and low-calorie sweeteners has replaced sugar in many uses, and sugar consumption has tumbled. From a peak of 11.1 million tons, raw sugar equivalent, in 1977, consumption fell to 7.86 million in 1986. This reduced import requirements. From 5 million tons in fiscal 1981, imports fell to 3 million in 1985 and 1 million in 1987. Sugar consumption rose slightly in 1987 from the previous year, but the rise was less than the growth in domestic production.

As the import component of total supply diminishes, it becomes harder to attain the dual requirements of the sugar legislation. At some point, restricting imports may no longer suffice to prevent forfeiture of sugar loan collateral.

### ***Prices, Health Concerns Cut U.S. Cigarette Use***

Higher prices, health concerns, and increased antismoking activities curtailed U.S. cigarette consumption to an estimated 574 billion in 1987, about 10 billion fewer than the year before and the third consecutive decline. Annual consumption per person 18 and older stands at about 160 packs of 20, down 2 percent from last year and the lowest since 1944.

Higher manufacturing costs (including profits) and steeper excise taxes have combined to boost cigarette prices. Standard cigarettes, which wholesaled for \$17.05 per 1000 in January 1980, cost \$37.15 by mid-1987. The Federal excise tax doubled to \$8.00 per 1000 in January 1983.

Thirteen States and the District of Columbia enacted or imposed tax hikes in 1987, with the average increase 6 cents a pack, or \$3 per 1,000. Many cities and other local governments also tax cigarettes, and about three-fourths of the States apply a sales tax.

Antismoking activity and Government restrictions on where people may smoke are reducing cigarette demand. Several organizations provide public information about potential adverse health effects of smoking and promote laws to restrict tobacco promotion and use. Several bills before the House and Senate would limit advertising and promotion of tobacco products.

During 1987, the Federal Government issued rules requiring that smoking within buildings owned or leased by the Government be limited to designated areas. In addition, the Senate approved a bill that would ban smoking on commercial airline flights of 1-1/2 hours or less, and the House has approved a smoking ban on flights of 2 hours or less. The differences must be resolved in a Senate-House conference committee before final action can be taken. [Glenn Zepp (202) 786-1767]

For further information, contact: Ben Huang, fruit; Glenn Zepp, vegetables; Dave Harvey, sweeteners; Verner Grise, tobacco. All are at (202) 786-1767.

## **RECENT PUBLICATIONS**

The following reports are available **FOR SALE ONLY** from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Order by report title and number. Make checks payable to Superintendent of Documents. Prices subject to change. Bulk discounts available. For faster service or further information call GPO's order desk at (202) 783-3238 and charge your purchase to your VISA, MasterCard, Choice, or GPO Deposit Account.

Land Resources for Crop Production: AER-572. (Price \$1.50.) Stock Number 001-019-00532-7.

The U.S. Oats Industry. AER-573. (Price \$5.00.) Stock Number 001-019-00526-2.

Developing an Integrated Information System for the Food Sector. AER-575. (Price \$4.00.) Stock Number 001-019-00524-6.

bST and the Dairy Industry: A National, Regional, and Farm-Level Analysis. AER-579. (Price \$5.50) Stock Number 001-019-00561-1.

Agricultural Irrigation and Water Supply. AIB-532. (Price \$5.00.) Stock Number 001-019-00552-1.

A Comparison of Agriculture in the United States and the European Community. FAER-233. (Price \$3.25.) Stock Number 001-019-00550-5.

World Feed Grain Trade, 1962-85: Barley, Corn, Rye, Oats and Other Cereals. SB-755. (Price \$7.00.) Stock Number 001-019-00534-3.

State-Level Feed Grain Statistics, 1949-86. SB-757. (Price \$8.50.) Stock Number 001-019-00546-7.

A Forecast Evaluation of Capital Investment in Agriculture. TB-1732. (Price \$1.75.) Stock Number 001-019-00545-9.



## Commodity Spotlights

### World Oat Trade & U.S. Imports

Before 1982, the United States was a net exporter of oats. Since then, it has become a net importer, taking an average of 31 percent of world imports during 1982-87. It is continuing as the world's largest net importer this year.

Oat imports were supported by bad weather and short, poor-quality U.S. harvests in 1983, 1986, and 1987. For 1984-85, domestic supplies seemed adequate to handle U.S. needs, but foreign oats were cheaper.

A study of the effects of oat imports between 1983 and 1986 revealed that domestic supply, domestic feed use, and net Government outlays rose modestly as a result of the imports, while producer prices declined slightly. As domestic oat supplies fell, users turned to imports. However, since the world market for oats is lower in volume and less dependable than other grains, relying on imports to augment supply shortfalls is risky.

Unlike trade in other grains, world trade in oats may continue to be limited. Trade averaged 1.4 million metric tons annually between 1960 and 1985. Most countries produce oats for the domestic market and export only when production exceeds domestic use.

The extent of trade also depends on the availability of other feed grains in

the world market. Oats are less likely to be traded than other grains because their light weight makes transporting them relatively expensive. However, their speciality use in feed and food necessitates some international movement.

Major exporters include Sweden, France, Australia, Finland, Argentina, and Canada. Together these countries exported an annual average of 85 percent of the world's oats in 1982-87.

Between 1960 and 1985, exports from the Soviet Union, United States, Canada, Germany, and Argentina declined, while exports from Sweden, Finland, and France increased. The United States imports most of its oats from Scandinavian countries and Canada. Exports as a share of production have been low for the larger producing countries but run from 8 to 20 percent for Australia, Sweden, Finland, France, and Argentina.

The U.S. market share of world oats exports averaged 15 percent during the 1970's and dropped to an average

3 percent during 1982-87. At the same time, its imports rose from 2 percent during the 1970's to 31 percent during 1982-87.

Whether the United States has permanently become a major oat importing country is uncertain. Recent imports occurred because oats were competitively priced, in part because of favorable transport rates, foreign subsidies, a strong dollar, and generally higher U.S. prices. Imported oats were of good quality, and domestic U.S. agricultural policy favored production of other crops. Continued high oat imports depend partly upon a low level of domestic production, a stronger dollar, and a surplus in foreign production. [Linwood Hoffman (202) 786-1840]

### Pork Supply Bulge Pushes Down Prices

The inevitable outcome of expansion in the hog industry is higher slaughter rates and lower prices. When slaughter jumped 10 percent above a year earlier in September, prices slid.

World Oats Trade by Major Trading Countries

Country	1970-79	Average Market Share 1980-81	1982-87
---Percent---			
<b>Exporters</b>			
U.S.	14.5	12.2	2.7
Canada	9.6	5.1	11.0
Australia	20.9	11.4	16.3
Sweden	13.0	26.1	23.4
Finland	3.4	0.0	12.0
France	11.1	19.7	17.3
Argentina	12.2	7.6	5.0
Other	15.3	17.9	12.3
---1,000 metric tons---			
<b>Total world</b>	<b>1,576.4</b>	<b>1,220.5</b>	<b>1,450.2</b>
---Percent---			
<b>Importers</b>			
USSR	9.4	0.0	10.0
U.S.	1.4	2.0	31.4
Germany, Fed.			
Rep. of	26.8	19.8	11.2
Japan	11.1	11.4	7.5
Italy	9.7	8.1	5.8
Belgium/ Luxembourg	4.5	4.9	4.5
Netherlands	3.8	2.9	4.3
Switzerland	10.5	11.3	8.5
Other	22.8	39.6	16.8
---1,000 metric tons---			
<b>Total world</b>	<b>1,519.6</b>	<b>1,104.5</b>	<b>1,332.2</b>



For pork producers, the timing of the supply bulge was problematic. The additional hogs hit the market when hams typically dominate the wholesale pork trade in preparation for Thanksgiving and Christmas.

### ***Turkey Competes With Holiday Hams***

The problem is that turkey is in direct competition with ham, and this fall, turkey is more abundant than ever. Together, the increased supplies of ham and turkey are fueling a hog price downtrend which could carry all the way into February. Per capita turkey supplies likely will exceed 7 pounds in fourth-quarter 1987, an increase of more than 17 percent from a year ago.

Accordingly, turkey prices are projected to drop an unprecedented 36 percent below last year's fourth-quarter average. The lower prices spell stiff competition for ham during the holiday season. Per capita ham supplies (derived from hog slaughter data) are up almost 6 percent from a year ago despite exceptionally low cold storage stocks at the beginning of the period.

The erosion in hog prices thus far has exceeded the normal seasonal decline from summer to fall, and it is likely to end up as the biggest such drop in 11 years. Since 1975, the price of barrows and gilts at the seven major markets has fallen from third to fourth quarter by an average of 8 percent. Even in years similar to 1987 having unusually high third-quarter prices (1975, 1982, and 1986), the price has slid only 11 to 13 percent. This year's third-quarter average was \$58.97. Prices below \$43 in November represent a decline in excess of 27 percent.

### ***Ham Prices Unusually Weak***

The seasonal change in hog prices is closely linked to the ham market during the fourth quarter. Wholesale ham prices typically rise through the summer and peak in the fourth quarter. Turkey prices do the same. There is a strong correlation between the seasonal rise in ham prices and concurrent changes in ham supplies and wholesale turkey prices.

Again drawing from 1975-86 figures, the average increase in the price of hams from third to fourth quarter is

just over 9 percent. This is accompanied by an average increase of 14 percent in per capita ham supplies, and an average increase of about 7 percent in turkey prices.

This year, fourth-quarter per capita ham supplies are about 17 percent above the third quarter. With large supplies of both ham and turkey, the ham price is forecast to fall 1 to 4 percent in the fourth quarter. It is very rare for ham prices to fall in the fourth quarter. With no strength in hams serving to offset low demand for other pork products, carcass values are weakened and the decline in hog prices augmented.

### ***Seasonal Price Pattern May Shift***

The increased supplies of ham and turkey and the exceptional drop in hog prices this fall could contribute to a distortion in the seasonal price pattern through the first quarter of 1988.

After establishing a seasonal low, hog prices usually recover at the end of the year and remain relatively firm until middle to late February. This is primarily due to a slowdown in slaughter rates in the winter, along with weather-related interruptions in marketings. In late February, production generally begins to pick up again and prices weaken.

Price recoveries this winter likely will be relatively small and short-lived. The June-August pig crop indicates that per capita pork supplies may hold steady from the fourth quarter of this year to the first quarter of 1988. This, too, is counterseasonal; until now supplies in the first quarter had declined every year since 1975/76.

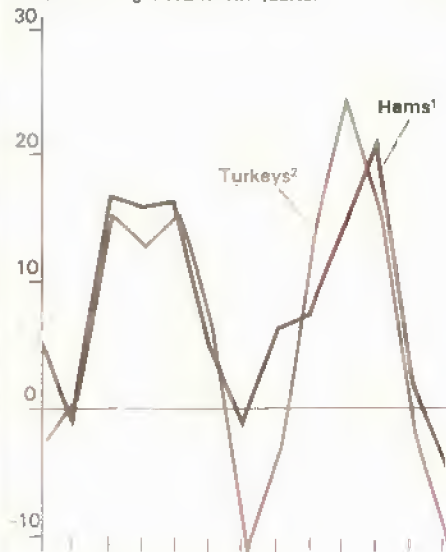
Historical supply-price relationships suggest that under present circumstances, first quarter hog prices should average below the reduced levels of the current-quarter, possibly by 10 percent. This would push the seven-market price down to the high \$30's in March.

The ham and turkey influence comes back into the picture through inventory management. The manner in which the market handles the current situation will affect the timing and extent of the seasonal recovery in hog prices this winter.

In order to move the large supplies through the marketing channel during the holidays, ham and turkey prices

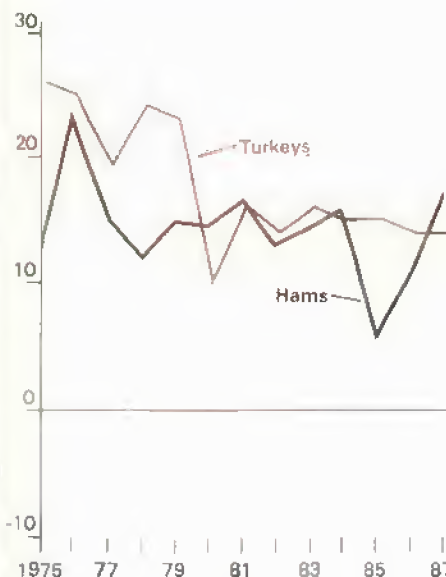
### ***Holiday Ham & Turkey Prices Are Lowest...***

Percent change, 3rd to 4th quarter



<sup>1</sup>17-20 pound hams, f.o.b. Omaha  
<sup>2</sup>Hen turkeys, Eastern region

### ***...When Combined Supplies Are Highest***



must be kept relatively low. If packers and retailers assume an aggressive posture, pushing prices low enough to move the meats before holiday orders are filled, hog prices will suffer in the near term, but inventories will be reduced.

This likely would result in an earlier seasonal low and pave the way for a

stronger and more expeditious recovery. There is a lot of turkey and ham to move, though.

If near-term price reductions are limited, the market may end up with burdensome inventories, resulting in a "fire sale" at the end of the booking period. In this case, hog prices would be supported in the near term, but seasonal lows would be delayed and the subsequent recovery would be subdued.

Either way, heavy slaughter weights could become a burden. Many producers adjust their marketings to seasonal price patterns. Those anticipating a significant rise in prices may hold hogs off the market. This creates a backlog of market-ready animals, and slaughter weights increase. If this situation develops, hog prices may not reach a seasonal low until the middle of January.

The seasonal decline in hog slaughter is expected to lend some support to prices in the near term. However, strong competition from turkey, relatively heavy pork supplies, and a possible backlog in marketings are likely to keep the market under pressure all winter. [Kevin Bost (202) 786-1830]

### Generic Certificates Influencing Corn & Wheat

USDA issued about \$11.2 billion of generic certificates from April 1986 through October 1, 1987, including \$9.34 billion as deficiency and diversion payments. Roughly \$1.52 billion were final corn and sorghum deficiency payments for the 1986 program; although these were mailed out before October 1, they are classified as fiscal 1988 payments. Consequently, implied issuances through fiscal 1987 totaled \$9.65 billion.

Certificate exchanges through September were valued at \$8.44 billion, leaving \$2.73 billion available as of October 1. Of this, \$1.21 billion was carried over from fiscal 1987. With the \$770 million of certificates issued in October that were not mailed out early and the \$734 million of exchanges from October 1 through November 4, this puts near-term certificate availability at about \$2.75 billion.

### Will Enough Certificates Be Available?

An assessment of the availability of certificates to meet market needs for corn and wheat during 1987/88 was conducted based on the following assumptions:

- half of all expected subsequent program payments made to farmers (excluding Conservation Reserve payments) during fiscal 1988 are in certificates,
- a 15-percent voluntary paid land diversion program for feed grains is in place for 1988,
- Conservation Reserve rental payments made in fiscal 1988 total \$780 million and are paid in certificates,
- advance payments are made for 1988 programs,
- an additional \$6.3 billion of certificates are issued in fiscal 1988, and
- 75 percent of certificates are exchanged for corn and 20 percent for wheat.

Based on these assumptions, there will be \$9.8 billion of certificates available in fiscal 1988. This is \$8.6 billion in issuances plus the \$1.2-billion carry-in. Questions have been raised as to whether this is enough if redemption prices for corn average higher than current levels.

For example, it is estimated that at an average redemption price of \$1.90 a bushel, certificates could be exchanged for 3.3 billion bushels of corn, or at \$1.60, for 3.9 billion. Based on current supply and demand estimates for corn, free supplies would fall about 190 million bushels short of expected use at \$1.60, or about 800 million bushels short at \$1.90.

Without additional issuances or a decline in demand, corn prices would have to rise to encourage cash redemptions sufficient to meet demand. Prices likely would increase during the summer quarter when other factors also would be affecting prices, such as prospects for next season's crop, the amount of corn rolled over from the Farmer-Owned Reserve, and the availability of other feed grains and wheat for feeding.

### Generic Certificate Availability

Item	\$ million
Issuances (through Oct. 1)	
Deficiency & diversion payments	9,339
Other	1,828
Total	11,167
Certificate exchanges (April 1986-Sept. 30, 1987)	8,438
Certificate availability (as of Oct. 1)	2,728
Certificate issuances (after Oct. 1)	770
Certificate exchanges (Oct. 1-Nov. 4)	734
Certificate availability (as of Nov. 4)	2,764

Additional issuances could be made this fiscal year if the share of program payments made in certificates exceeded the assumed 50-percent rate. By law, program payments in generic certificates are limited to 50 percent for advance deficiency payments.

For wheat, a similar analysis suggests that at current demand estimates, about 300 million bushels will need to be acquired from CCC stocks during 1987/88, because free supplies and outstanding loans are less than expected demand for the rest of the year.

On October 30, USDA announced that certificate holders may bid for wheat listed in CCC catalogs. A new CCC catalog was released on November 2. Along with the old catalog (dated July 17, 1987), the new catalog makes available a total of 415 million bushels.

While it is uncertain how much wheat will be released to the market through the program, it could be enough to satisfy the implied additional needs of 300 million bushels. The markets responded to the CCC bidding announcement by dropping prices. The cash price for #2 Kansas City Hard Red Winter fell from \$2.89 a bushel on October 30 to \$2.77 by November 3. Prices subsequently moved back up and were \$2.85 to \$2.90 in mid-November.

CCC will make available up to 10 million bushels of wheat per week to the highest bidders, although it does not have to accept any bids and may accept bids for more. Weekly bids will



Cumulative Generic Certificate Exchanges as of November 4, 1987

Commodity 1/	CCC Inventory	Producer loans	Total
<b>Food grains</b>			
Wheat			
Volume (mil. bu.)	205.2	450.6	655.8
Value (\$ mil.)	501.4	1,100.9	1,602.3
Rice			
Volume (mil. cwt.)	41.1	0.3	41.4
Value (\$ mil.)	145.6	1.0	146.6
<b>Feed grains</b>			
Corn			
Volume (mil. bu.)	212.2	3,853.7	4,165.9
Value (\$ mil.)	344.9	6,425.6	6,770.5
Grain Sorghum			
Volume (mil. bu.)	56.0	210.0	266.0
Value (\$ mil.)	93.3	349.8	443.1
Barley			
Volume (mil. bu.)	37.6	92.0	129.6
Value (\$ mil.)	50.2	122.6	172.8
Cotton			
Volume (mil. bales)	0.87	5.93	6.79
Rye, oats, soybeans			
Value (\$ mil.)	10.5	26.2	36.7
<b>Total value (\$ mil.) 2/</b>	<b>1,145.8</b>	<b>8,026.2</b>	<b>9,172.0</b>

1/ Other program commodities, for which few or no exchanges have been made, include honey, nonfat dry milk, butter, and cheese.  
2/ Does not include values for cotton exchanges.

Source: Agricultural Stabilization and Conservation Service, USDA.

alternate between the old and new CCC catalogs. The first bid was from the old catalog. This program will not modify how posted county prices (PCP's) for wheat are set or how farmers use certificates to reacquire loan collateral. Bids must be submitted to the CCC office in Kansas City by 2:00 pm CST each Friday to be eligible for that week's sale of CCC stocks.

On November 6, a total of 8.5 million bushels of wheat were acquired from CCC stocks through the new certificate bidding program. Bids were accepted for certificates valued at about \$20.4 million; the average accepted bid price was \$2.36 a bushel. Accepted bids ranged from \$2.04 to \$3.58 a bushel. On November 13, USDA sold an additional 9.2 million bushels of wheat at an average bid price of \$2.39 a bushel. The market showed minimal response to the freeing up of CCC stocks through the certificate bidding program during these 2 weeks.

The bid price was below cash prices, because bidders take into account handling and transportation costs for the acquired wheat and, when applicable, the cost of acquiring certificates to make the bid. Certificate premiums were running about 6 percent in early November.

Another program change could further encourage use of certificates by farmers this fiscal year. Previously, when farmers placed their crops under loan and used certificates immediately to reacquire part or all of their loan collateral through "Quick-PIK" exchanges, they were subject to the PCP on the day that the loan paperwork was processed.

At the time of placement farmers may now choose either the PCP on the day crops are placed under loan, or the PCP at the time the loan paperwork is completed. This will lessen the risk to farmers from PCP increases.

### Certificates Exchanges Rose Sharply in September

Certificate use picked up this fall from the summer's low levels and from the fall of 1986, as the wheat harvest drew to a close and harvesting of the corn crop proceeded ahead of schedule. From August 26 through November 4, \$1.49 billion worth of certificates were exchanged, compared with \$964 million from June through August and \$810 million during September-November 1986.

Use of certificates by farmers during September-November ran well ahead of 1986/87, primarily because of

heavier placement of corn under loan. Corn placements this season are running ahead of the pace in 1986/87 because the corn crop was harvested much earlier, the harvest-quarter supply of certificates is larger, and market conditions are more favorable.

Through November 4, 968 million bushels of corn had been placed under loan, compared with 536 million last year. Wheat placements, however, are below last season—337 million bushels through November 4, compared with 400 million through November 5 last year. For most other program commodities, placements of 1987 crops are below a year ago.

About 73 percent of the \$1.49 billion in exchanges were for corn and 17 percent for wheat. Virtually all of these exchanges—694 million bushels of corn and 93 million bushels of wheat—were reacquisitions of loan collateral.

Through November 4, 350 million bushels of 1987-crop wheat were placed under loan, with all but 105 million placed after August 26. Certificates were exchanged for about 96 percent of the 68 million bushels of 1987-crop loan collateral and 29 million bushels of old-crop collateral reacquired during this 10-week period. About 98 percent of the 706 million bushels of corn loan collateral reacquired were obtained with certificates (332 million bushels are 1987-crop collateral). [Michael Hanthorn (202) 786-1840]

### Parsley Root & Purple Potatoes: Specialty Produce Piques Interest

Consumer interest in specialty produce—the exotic and unusual-looking fruits and vegetables now displayed along with traditional produce—is providing new opportunities for growers. Moon- and-stars watermelon, purple potatoes, red chili peppers, guavas, and twenty-first century pears are a few examples of the tropical, Mexican, Oriental, and other unusual varieties of produce now available on many grocery shelves.

As with traditional vegetables, domestic production of specialties is concentrated in California and Florida, although growers all over the country have begun to experiment. The supply of both traditional and specialty produce has been growing steadily.

However, while shipments of traditional produce items such as tomatoes, carrots, and celery have been growing about 2 percent annually since 1980, shipments of specialties have been skyrocketing. For example, imported mango shipments have grown 12 percent a year since 1980, domestic romaine lettuce 16 percent, and unusual varieties of domestic peppers 34 percent.

The appearance of unusual fruits and vegetables on restaurant menus in recent years, plus the increasing numbers of Americans who travel and try new foods abroad, has piqued consumer interest in trying these foods at home. In addition, recent immigrants from the Caribbean, Central America, and Southeast Asia brought their crops with them and are influencing the American diet.

New transportation technologies also have made perishable specialty imports important. A recent Food Marketing Institute survey showed that the number of items carried in produce departments more than doubled between the mid-1970's and the early 1980's, to 150. The total is 200 items today.

Many consumers are trying these unusual items, according to a 1987 nationwide survey conducted by the Vance Research Services. The survey revealed that the most frequently tried vegetables were alfalfa and bean sprouts (71 percent of the respondents), snow peas (58), pearl onions (61), parsnips (45), leeks (37), baby vegetables (34), Chinese cabbage (32), and shallots (32).

Specialty fruits that respondents had tried most frequently included pomegranates (48 percent of the respondents), persimmons (38), kumquats (33), quince (18), and guavas (16).

Respondents had also seen or heard of many fruits and vegetables that few had tried, including breadfruit, prickly cactus pears, passion fruit, uglifruit, Belgian endive, celeriac, parsley root, and radicchio. The survey revealed that, in general, males, upper-income households, and consumers in the West were more likely to have tried or heard of the specialty produce items.

#### ***Specialty Acreage Expanding Rapidly***

While some large-scale fruit and vegetable growers, especially in California and Florida, have produced specialties

for a long time, more have shifted acreage into specialties in recent years. For example, the first California plantings of kiwifruit were made in 1967; by 1971, only 100 acres had been planted. However, by 1984, nearly 7,000 acres had been planted in California, and this year there are 8,700 acres of kiwifruit, produced by more than 1,200 growers and distributed by 45 fresh-market handlers.

Prices for unusual varieties of fruits and vegetables can be higher than for their traditional counterparts because of the appeal of the unusual, and because of their low volume. Cuban-type peppers, for example, were consistently higher priced than California green peppers during 1986. One firm marketed several unusual varieties of vegetables under brand names this year—for instance the Le Rouge Royale red bell pepper—and these varieties sold for higher prices than their traditional counterparts.

Growers all across the country, including those with small and part-time operations, have begun to produce specialties in response to consumer interest. In addition, the recent State-level crop diversification programs, aimed at financially stressed farmers, encouraged growers to consider specialty produce as well as traditional fruits and vegetables.

In Michigan, a marketing association of 14 growers and 10 commercial businesses was incorporated in 1985 to produce specialties after a State Commerce Department study indicated this was a growth area. The Michigan Marketing Association's specialties include fiddlehead ferns, chanterelles, edible flowers and herbs, and paw paws, which are similar to a tropical fruit but native to the central United States.

In Texas, the Trinity Valley Marketing Exchange was formed early this year to supply Dallas-area restaurants with specialties. The Texas Department of Agriculture hosted a conference to find local growers willing to produce the specialties that the Dallas restaurants were importing from Europe, California, and Florida.

The Texas exchange consists of 12 growers, 85 acres of land, and 14 greenhouses, producing specialties like Golden Nugget cherry tomatoes, celeriac, mezjuna, French shallots,

Chinese kale, Japanese white mustard, and herbs. In Virginia, growers began experimenting with shiitake mushrooms 5 years ago, and today there are 150 commercial shiitake growers in the State.

Research to improve and adapt new varieties of fruits and vegetables for U.S. production and to solve growing and handling problems is being done by commercial growers, States, and the Federal Government.

#### ***Miami Station Researches New Varieties***

One of the oldest research centers for new varieties is USDA's Subtropical Horticulture Research Station in Miami. The Miami Station, established in 1898, has expanded from 6 to 210 acres and has catalogued over 20,000 plant varieties. The station is currently developing a new variety of passion fruit which may be grown as far north as Virginia and Maryland and still has the quality and flavor of the Brazilian species.

A 2-year Cornell University study recently concluded that over 100 varieties of gourmet, Oriental, and other specialty vegetables can be grown by commercial and home growers in the Northeast. Snap peas, garlic, miniature squash, Chinese cabbages, and other specialty vegetables are being examined at Cornell. Some commercial growers are devoting part of their land to experimental production.

Quality and selection in the produce department has become the most important factor when consumers choose a supermarket. A University of California study projects that per capita domestic consumption of fruit and vegetables will increase more than the demand for total food, with consumers favoring fresh produce and showing interest in specialties.

Also, supermarkets are becoming increasingly sophisticated in their display and marketing of specialties, using educational materials and recipes to boost sales. Problems such as thin markets, finding appropriate varieties, and difficult post-harvest handling remain, but consumer interest and grower opportunities in specialty produce are likely to continue. [Cathy Greene (202) 786-1767]



## Edible Oil Trade Begins To Sizzle

Growth in world output of edible vegetable oils will slow and consumption will rise in key importing countries during the 1987/88 marketing year (October-September). The runup in world vegetable oil stocks which began in 1984/85 will slow to less than 2 percent growth this year, versus average annual growth of 13 percent in the previous three seasons.

Combined world ending stocks are forecast at 5.77 million tons for the nine major edible oils: soybean, palm, sunflowerseed, rapeseed, cottonseed, peanut, coconut, olive, and palm kernel.

Early-season indications of supply tightness in some foreign markets have stabilized prices, albeit at levels much reduced from 1983/84 peaks. Price improvement is expected in 1987/88.

The United States is forecast to register an export increase during 1987/88 for the first time since 1981/82. However, higher exports will not offset a rise in vegetable oil availability, and ending stocks (largely soybean oil) will climb 13 percent to a record 1.2 million tons. The United States will hold 21 percent of world stocks of edible vegetable oil at the end of this season, up from an average 14 percent the preceding three seasons.

### World Output To Grow 3 Percent

The growth of world edible vegetable oil production is forecast to slow to just over 3 percent in 1987/88, from an annual average of nearly 6 percent in the previous 3 years. World production is forecast at 49 million tons. The reduced growth is due to a slower expansion in world protein meal demand, drought in India, and a fall in coconut oil output in the Philippines.

Total world consumption of edible vegetable oils this season is forecast at 48.7 million tons, about equal to production and up 3.8 percent over 1986/87. Much of this increase is in major importing countries: the USSR, China, Pakistan, India, and importers in North Africa.

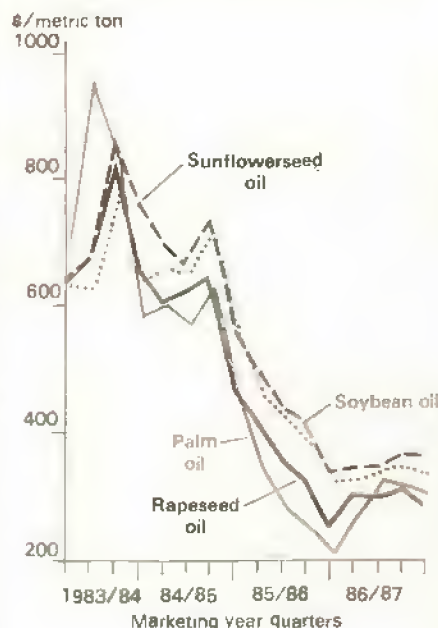
World trade is forecast to increase, since the countries with larger demand are not the same as the ones with larger supplies. Imports and ex-

Imports & Exports of Edible Vegetable Oils, 1983/84-1987/88

	1983/84	1984/85	1985/86	1986/87	1987/88
1,000 metric tons					
<b>Importers</b>					
EC-12	3,221	3,453	4,018	3,892	3,614
N. Africa & Mideast	2,176	2,587	2,581	2,584	2,858
India	1,697	1,377	1,194	1,540	1,710
U.S.	719	779	1,106	1,038	1,016
China	42	111	544	751	881
Pakistan	630	680	1,007	605	775
USSR	630	876	604	660	732
E. Europe	371	408	422	316	296
<b>World</b>	<b>12,500</b>	<b>13,770</b>	<b>15,170</b>	<b>15,170</b>	<b>15,630</b>
<b>Exporters</b>					
Malaysia	3,264	3,742	4,720	4,646	5,033
EC-12	3,170	3,338	3,421	3,818	3,700
Argentina	1,122	1,490	1,743	1,395	1,672
Brazil	1,047	1,140	538	1,093	913
U.S.	1,172	1,101	1,028	818	990
Indonesia	297	942	732	595	765
E. Europe	324	378	350	490	367
N. Africa & Mideast	256	231	158	215	195
<b>World</b>	<b>12,450</b>	<b>14,290</b>	<b>15,300</b>	<b>15,450</b>	<b>15,870</b>

Source: USDA/FAS

Prices of Edible Vegetable Oils Stabilize, But Far Below 1983/84 Peak



ports are each up about 3 percent, following no change in imports and negligible growth for exports last season. Imports are up in Pakistan (28 percent), China (18), India (11), and the USSR (11).

Of the major world importers, only the EC and the United States are forecast to purchase less vegetable oil this year

than last. Record oilseed production in the EC accounts for a 7-percent decline in the region's vegetable oil imports from 1986/87. The EC is traditionally a net vegetable oil importer, but exports exceed imports this year.

Malaysia, Indonesia, Argentina, and the United States are the exporters that benefit most from rising demand. Malaysian exports are forecast at a record 5 million tons.

### U.S. Exports Up

U.S. edible vegetable oil exports are forecast to increase to 990,000 tons (635,000 tons soybean oil), up from 818,000 in 1986/87 (538,473 soybean oil). U.S. market share is also up, from 5 percent to 6. This is the first gain in export market share in a decade. U.S. imports of edible vegetable oil are down 2 percent to just over 1 million tons.

Export promotion programs support a large share of U.S. sales. As of early November, 383,730 tons of vegetable oil had been allocated for export under P.L. 480. As of October 30, GSM-102 export credits totaling \$173 million had been announced. This could spur over 400,000 tons of exports. As of October 23, USDA had also announced three Export Enhancement Program initiatives for vegetable oil. Tunisia, Morocco, and Algeria are each targeted for up to 60,000 tons of oil.

## Prices Stabilize

The 2-year freefall of prices in the world vegetable oil market ended last year. Prices during 1987/88 will be supported by the growth in consumption and trade; a significant drop from a year earlier in U.S. beginning stocks of soybeans; and the slowdown expected in the growth of world vegetable oil ending stocks this year.

Price improvement this year will start from a low 1986/87 base, and prices should remain well below the peaks of 1983/84. For example, 1986/87 average prices for the major traded oils—soybean, palm, sunflowerseed, and rapeseed—were down 50 to 60 percent from the 1983/84 average.

Price differentials between the major traded oils have narrowed. The average price discount of palm oil (f.o.b. Malaysia) to soybean oil (Decatur) dropped to just \$29 per ton in 1986/87, versus \$123 in 1985/86. Rapeseed oil's price was the lowest of the four oils last year, and record world rapeseed production this year—paced by a 60-percent rise in the EC—should preserve this price position during 1987/88.

U.S. soybean oil prices (Decatur) are forecast between \$309 and \$375 per ton for 1987/88, versus an average \$339 in 1986/87. The price competitiveness of palm oil could improve in the latter half of the year as production recovers from the seasonal slowdown of late autumn and early winter.

## Uncertainties Remain For Production, Trade

Production and supply uncertainties influence this early-season assessment. Oil crops are being sown in Brazil and Argentina, and area is expanding in response to strong domestic and world prices for soybeans. Any significant increase in Southern Hemisphere soybean output could raise supplies of vegetable oils and threaten the improving world balance.

The final disposition of the record EC rapeseed crop will have a significant impact on this year's global vegetable oil balance. Nearly 40 percent of the 2.2-million-ton increase in the crop is forecast to end up in stocks. However, a higher-than-expected rapeseed crush in the EC, or seed exports above expectations to crushers in vegetable-oil deficit markets, could alter the forecast world trade balance of oils.

[Robert Cummings (202) 786-1665]



## Farm Finance

### INCOME DISTRIBUTION BY FARM TYPE

Today's highly specialized farm sector consists of farm types with varied financial conditions. Not only do earnings differ markedly among farm types, but debt and asset levels show extreme divergence.

Farm types are defined as operations with over half their total sales from a specific commodity or commodity group. Estimates of income by type of farm are based on the 1986 Farm Costs and Returns Survey, adjusted to reflect 1987 conditions. Income is reported by calendar year.

General crop and general livestock operations are the two broadest types defined. General crop-and-livestock operations are those with over 50 percent of sales from crop and livestock products together, but with no single commodity accounting for more than half of all receipts.

### Crop Farm Receipts Slip 9 Percent This Year

Gross cash income on crop farms in 1987 is down 3 percent from a year earlier; crop enterprises experienced a 9-percent gain in sales of livestock and products, a 28-percent gain in direct Government payments, and a 5-percent reduction in expenses. But, these improvements failed to offset a 9-percent loss in crop receipts. Crop receipts on crop farms are down \$5 billion.

Although the difficulties facing many crop producers have become common knowledge, there is less knowledge of which producers are bearing the brunt of these hardships and are caught in the tightest income or financial squeezes. Recently, livestock has been more profitable than crops—gross cash income on livestock farms is up 3 percent in 1987, and net income is up 11 percent—although profitability levels and financial positions are unevenly distributed among the various types of livestock farms.

Among crop farms, net cash income is down on corn, soybean, rice, and cash grain farms, with greater reductions concentrated on corn farms. Corn farms, numbering 162,000 (7 percent of all farms in 1987), are exceeded in numbers only by general crops farms. The number of corn farms is down 2 percent from last year.

Net cash income earned by corn farms is estimated to be substantially lower in 1987 than the record levels in 1986, as reduced output and lower prices offset larger Government payments, increased livestock sales, and smaller production expenses. (Net cash income equals gross earnings, including direct Federal payments, less cash production expenses.) Prices would probably have settled still lower had corn exports not improved about 8 million metric tons in fiscal 1987.

### Income Is Up On Wheat Farms

For the nation's 69,000 wheat farms, 1987 prices weakened and production fell slightly. A 16-percent fall in crop receipts on wheat farms is more than offset by higher direct Government payments, an increase in livestock sales, and a 5-percent savings in production expenses. Wheat farms this year are seeing an estimated 15- to 20-percent gain in net cash income from 1986.

On tobacco farms, crop receipts are falling moderately, so higher livestock sales, increased Federal subsidies, and lower cash expenses are providing only about 4 percent growth in net cash income. Tobacco farms' earnings remain well below 1985, failing to recover fully from the sharp production and price declines of 1986.

Tobacco farms have small debts and strong assets relative to other crop farms. Thus, they are among the



most solvent of all farm types. Only nursery/greenhouse and cattle operations have similar debt-to-asset levels—solvency measures for these two farm types and for tobacco farms are almost twice as strong as the average for the whole farm sector.

For tobacco farms, total liabilities this year represent 11.5 percent of the value of assets. By comparison, debt as a portion of corn enterprise assets is nearly 39 percent, indicating much greater reliance on borrowed capital and a lower degree of financial reliability in lenders' eyes. For crop farms and for the sector as a whole, these key financial indicators are estimated at just under 28 and 22 percent, respectively.

Soybean farms have steeper declines in 1987 receipts than the average crop farm, but they have enjoyed larger-than-average year-over-year savings in cash operating costs and an estimated 30-percent rise in Federal payments. Although farmers receive no direct payments for soybeans, they do receive payments for program crops grown on the farm. Net cash income is forecast to be down around 15 percent.

For cotton farms, strong prices and income growth have received support from improved exports. Cotton exports this year have risen 167 percent in volume and 112 percent in value.

Despite this income growth, cotton farms are expected to be the most highly leveraged farm type in 1987. Between 1985 and the 1987 forecast, cotton operators' liabilities averaged 54 percent of the value of total assets. This ratio is nearly 80 percent above the all-farm average and 27 percent greater than for corn farms.

#### **Livestock Receipts Gain 11 Percent**

Livestock farms, which typically account for nearly 60 percent of all farms, have about offset reduced crop earnings since 1985 and 1986 with increased livestock sales and larger direct Government payments. Hog, broiler, and turkey producers, responding to rising demand and attractive feed-price ratios, have expanded their combined production by more than 6 percent in 1987.

Despite growth in value, total livestock output has been almost unchanged this year, because of a

4-percent decline in cattle and dairy production. Reduced dairy output in 1987 is partially explained by the impact of the now-concluded Dairy Termination Program, which cut the number of dairy cattle roughly 400,000.

Specialized beef cattle farms have strong prices to compensate for reduced output. Receipts from all livestock enterprises likely are up 11 percent in 1987 on these specialized beef cattle farms. Cattle operations enjoyed a 25- to 30-percent increase in Federal payments on program commodities and a decrease of around 2 percent in cash operating costs. These, combined with the rise in gross income, could add over \$2.2 billion to 1987 net cash income on cattle farms.

Cash expenses for livestock farms are down largely because of lower priced feed. While beneficial to livestock enterprises, low feed costs underlie much of the slippage in cash receipts earned by feed grain producers. Besides having an improved income and cash flow position, livestock farms generally have lower total debt outstanding as a share of assets than crop enterprises do. Cattle farms, which possess nearly 30 percent of total farm sector assets, underlie this.

Hog farms, which have contributed much to the recent growth in livestock earnings, may realize a gain of 15 to 20 percent in 1987 net cash income. This rise would double 1985 net earnings. It is the direct result of strong hog prices, output growth, and dramatically lower feed costs and interest charges.

#### **Hog Farms Have Improved Solvency**

Cautious expansion, accompanied by debt reduction, may have strengthened the solvency position of hog farms by 10 percent or more. If operators continue to expand without incurring additional debt, they could secure healthy financial positions and better withstand any future downturns. In the short term, recent income and financial gains may be important cushions against forecast lower hog prices.

Dairy income has probably grown. Output per cow has increased, receipts have strengthened slightly, Federal

price and income supports continue strong, and cash operating costs have declined.<sup>1</sup>

For livestock farms as a whole, 1988 may represent a change from the recent income strength, as high output levels catch up with markets. With the exception of cattle and calf prices, livestock prices are forecast to decline around 5 percent next year. Total red meat and poultry production may rise 2-3 percent, exerting downward pressure on prices in late 1988 and beyond. Projections are for stronger crop prices, which would further weaken livestock incomes. [Richard Kold (202) 786-1808]

<sup>1</sup> Dairy producers have received roughly 6 percent of all payments in 1987. Although a portion of this has come from the Dairy Termination Program, crops payments also contribute to subsidies.

### **Upcoming Economic Reports**

Summary Released	Title
<b>December</b>	
1	Exports
4	Econ. Indicators of the Farm Sector
10	World Ag. Supply & Demand
15	Tobacco Yearbook
17	Econ. Indicators of the Farm Sector
18	Agricultural Outlook
	Foreign Ag. Trade of the U.S.
21	Rural & Ag. Finance



## World Agriculture and Trade

### U.S. & CANADA SIGN TRADE ACCORD

In early October, the United States and Canada signed an agreement to remove trade barriers and expand market access between the two countries. The agreement, following a walk-out by the Canadian negotiators in late September, was signed only hours before a Congressionally mandated deadline. Several provisions relate specifically to agricultural products, and others deal with wine and forest products.

The President must sign a final version of the agreement by January 2 and then submit it to Congress, which will have 90 legislative days to consider it. Under the fast-track negotiating authority extended to the Administration by Congress, both the Senate and the House must vote the agreement either up or down, with no amendments allowed. The Canadian Parliament must also approve the agreement; in addition, the 10 provinces must agree to change provincial legislation to implement the agreement.

#### *Countries Aim for Broad Trade Liberalization*

In September 1985, following the 1985 "Shamrock Summit" between President Reagan and Prime Minister Mulroney on St. Patrick's Day, Mulroney formally requested that the United

States enter into negotiations aimed at producing the "broadest possible package of mutually beneficial reductions in tariff and nontariff barriers between the two countries." President Reagan requested fast-track negotiating authority from Congress, and negotiations began in May.

Canada's overriding concern in the negotiations was to ensure access to the U.S. market without being subject to U.S. trade remedy laws. To this end, the Canadians wanted exemption from U.S. dumping and countervailing duty laws and a binding dispute-settlement mechanism for resolving trade issues. They insisted on maintaining various domestic institutions, including agricultural marketing boards.

The United States wanted to see looser restrictions on U.S. investment in Canada, furthering moves made since Mulroney came into power in 1984.

#### *Ag Trade Between Two Totalled \$4.5 Billion in 1986*

Total trade between the United States and Canada is already large, amounting to \$124 billion in 1986. Agricultural trade accounted for about \$4.5 billion, with the United States having a \$500 million net surplus.

Major U.S. agricultural exports to Canada are fruits, vegetables, cotton, rice, and nuts—many products Canada cannot produce because of its cold climate. Principal U.S. imports from Canada are live animals, meats, and other animal products.

Canada is one of the top five customers for U.S. agricultural products, but during the 1980's the agricultural trade balance has been steadily shifting in Canada's favor.

This shift largely reflects the depreciation in Canada's dollar against the U.S. dollar, making imports from Canada cheaper and U.S. exports more expensive to Canadians. The changing trade balance has been accompanied by an increasing number of agricultural trade disputes, including disagreements over potatoes, hogs, and corn.

Most of the provisions of the agreement that relate to agriculture deal with tariff reduction and quantity re-

strictions. Several provisions pertain to specific commodities. Other language deals more generally with agricultural subsidies and technical barriers.

Among the agreements are the following:

- *Both countries will eliminate all agricultural tariffs within 10 years. Although nontariff trade restrictions are the principal barrier to trade in most agricultural products, tariffs are significant for some products.*

U.S. fruits and vegetables, vegetable oil, processed eggs, poultry, cigarettes, and beer are subject to high Canadian tariffs. U.S. tariffs are highest on Canada's exports of rapeseed oil and meal, selected vegetables, tobacco, and wine. Because both countries' tariffs are higher on processed items, trade in high-value agricultural products will especially benefit from tariff reductions.

- *With respect to tariffs on fresh fruits and vegetables, a conditional reversion to the existing tariff rate will be allowed for 20 years. Fresh fruits and vegetables are subject to the 10-year tariff reduction, but if certain conditions are met, tariffs will be allowed to revert to existing levels.*

- *The United States agreed not to put quantity restrictions on imports of Canadian products having 10 percent or less sugar by dry weight. The United States has had import quotas on certain sugar-containing products since 1985. This provision, although not different from current laws, assures Canada continued market access for some products that contain sugar.*

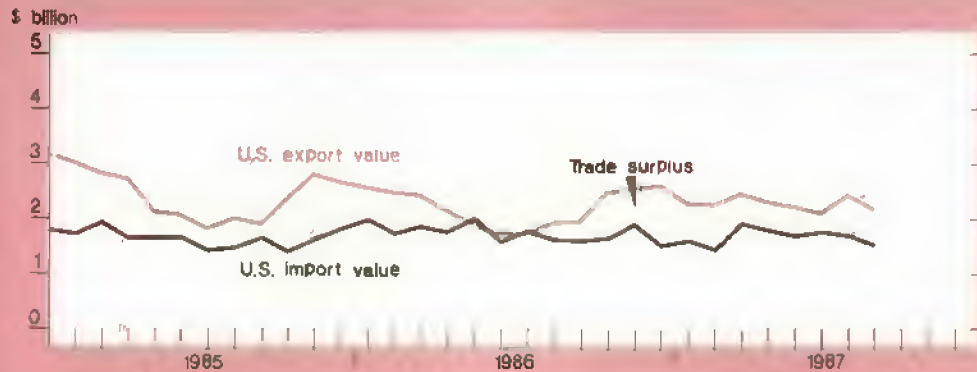
- *Canada agreed to eliminate import licenses for U.S. wheat, barley, oats, and products, as soon as support levels for these products in both countries are equal. This provision would allow greater access for U.S. products. Removal of licenses on wheat could be especially significant because of Canada's two-price wheat system, which currently maintains domestic prices above world prices.*

In a related provision, both countries have agreed not to impose or

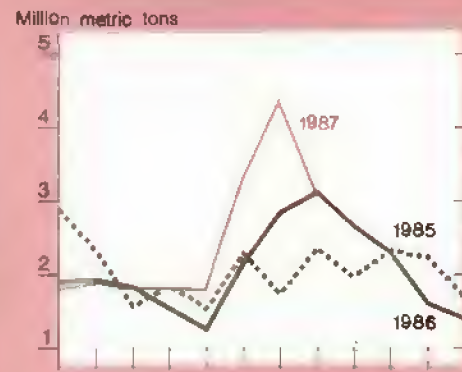


# U.S. Agricultural Trade Indicators

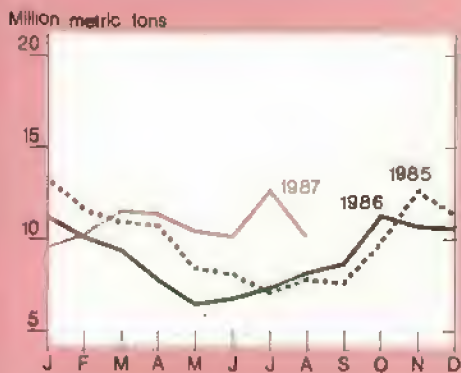
U.S. agricultural trade balance



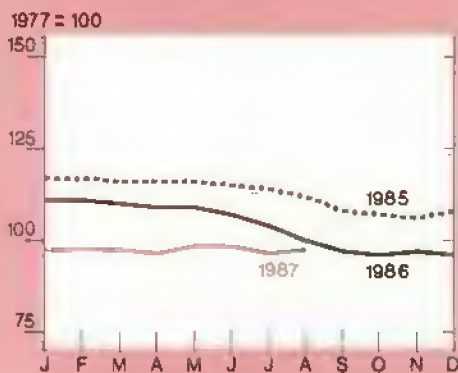
U.S. wheat exports



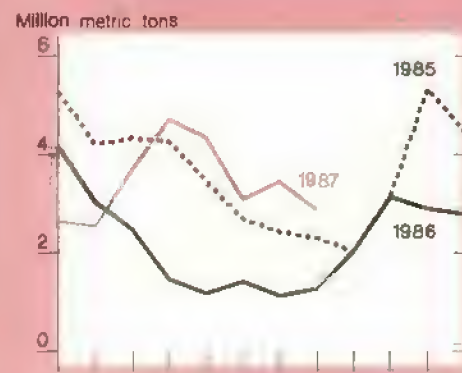
Export volume



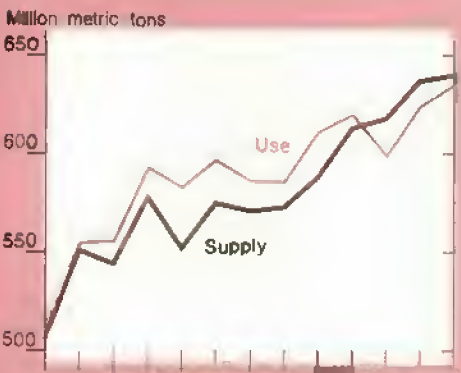
Index of export prices



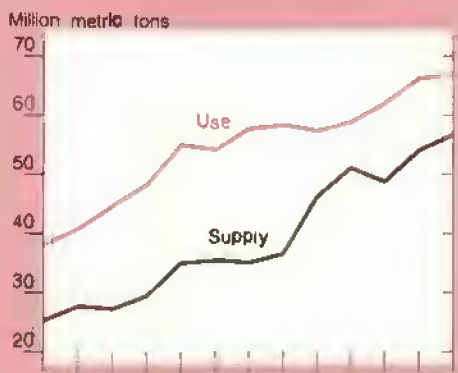
U.S. corn exports



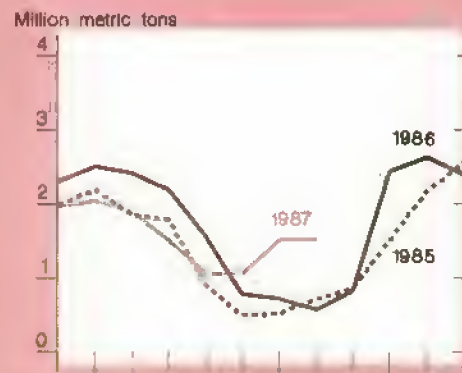
Foreign supply & use of coarse grains



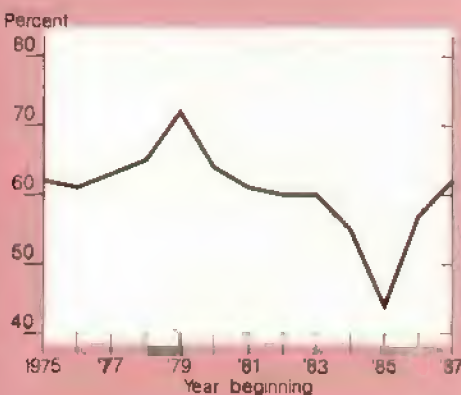
Foreign supply & use of soybeans



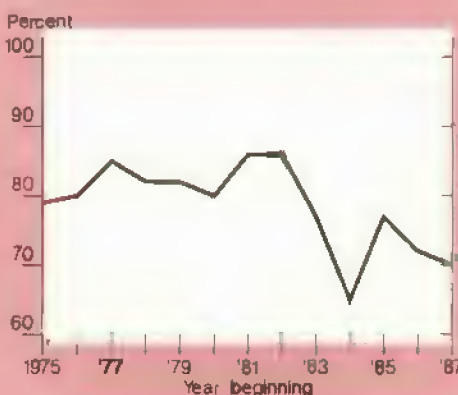
U.S. soybean exports



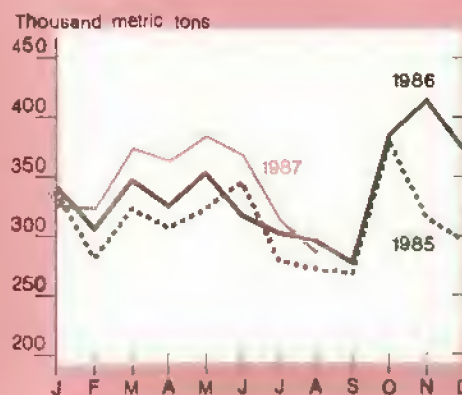
U.S. share of world coarse grains exports<sup>1,2</sup>



U.S. share of world soybean exports



U.S. fruit & vegetable exports<sup>3</sup>



<sup>1</sup>Excluding intra-EC trade

<sup>2</sup>October-September years

<sup>3</sup>Includes fruit juices.

# U.S.-Canada Trade in Selected Farm Products, 1986

Commodity	U.S. exports to Canada 1/	U.S. imports from Canada 2/
---\$ million---		
Wheat	--	25.5
Oats	--	7.5
Barley	--	11.9
Fruits		
(fresh/frozen)	529.8	50.7
Vegetables		
(fresh/frozen)	466.6	75.4
Vegetable oil	49.7	22.6
Rapeseed oil	--	14.7
Rapeseed meal	--	14.0
Eggs	19.2	9.8
Poultry meat	39.4	25.1
Tobacco	4.2	33.9
Wine	7.6	1.0
Beef	76.8	131.1
Sugar & related products	39.8	125.0
Total selected products	1,333.0	533.4
All products	2,619.5	2,009.7

-- = nil.

1/ Agricultural Canada, *Canada's Trade in Agricultural Products*, 1986. U.S. exports to Canada are based on Canadian import data because U.S. Bureau of Census data underreport exports shipped to Canada by truck. 2/ USDA, *Foreign Agricultural Trade of the United States*, 1986.

reimpose quantity restrictions on grain or grain products as long as there are no significant changes in grain support programs that would lead to a significant change in imports from the other country

- *Canada agreed to remove transportation subsidies for products moving through western ports to U.S. markets.* Western Canadian grains and oilseeds destined for export have been eligible for subsidized rail rates for many years. In 1984, rates were raised, but subsidies were extended to more products. This helped increase Canadian exports to the U.S. Pacific Northwest.

Removal of subsidies would mean that transportation rates on products destined for U.S. markets through Western Canadian ports would increase from about Can\$6.00 per ton to about Can\$30.00, likely reducing Canadian exports of these products. Products exported to the United States through the port of Thunder Bay on Lake Superior, which

were eligible for the subsidized rates prior to 1984, would not be affected.

- *Canada agreed to increase global import quotas for poultry, poultry products, and eggs to the annual average of actual shipments during the past 5 years.* Canada regulates its poultry sector by a supply management system that controls production and imports by quotas.

U.S. poultry exports to Canada have exceeded the global quota in recent years. The United States has exported additional quantities under supplemental quotas because Canadian demand has exceeded domestic production. If Canada reduces supplemental quotas in the future, this provision would ensure U.S. access to the Canadian market.

- *The two countries will exempt each other from their respective meat import laws.* Both countries have countercyclical red meat import laws that are designed to limit imports when domestic production is large. The United States has not imposed quotas on Canada

since the red meat import law was revised in 1979, although the United States limited Canadian imports in 1982 and 1983 under voluntary restraints.

Canada imposed its meat import restriction in 1985, but applied quotas only to EC beef. Although beef already moves freely between the two countries, this provision should provide even greater certainty to exporters that shipments will not be interrupted by quotas.

- *Other agricultural provisions and issues.* Both countries have agreed not to use direct export subsidies on agricultural products shipped to each other. They have also agreed to minimize technical barriers that interfere with trade in food and beverages.

Both the United States and Canada make use of a wide range of programs to assist producers in agriculture as well as in other sectors. The negotiators decided to defer negotiation on any agricultural subsidy reduction to the multilateral trade talks now going on under the auspices of the General Agreement on Tariffs and Trade. These negotiations began in September 1986 in Uruguay.

In other provisions of the agreement, access for U.S. wine and distilled spirits will be improved by according U.S. products treatment more equal to that given domestic Canadian products. Discriminatory pricing, distributing, and retailing practices have impeded U.S. penetration of the Canadian market. Many of these practices will be phased out.

Both countries will retain their laws regarding dumping and countervailing duties. Disputes over trade remedy law decisions may be appealed to a bilateral panel. Duties currently in place because of application of national law will remain, but annual reviews of these duties can now be further reviewed by the bilateral panel.



### **Beneficiaries: U.S. Wine, Fruit, Vegetables, Processed Products**

About half of the value of U.S. exports to Canada and one-quarter of U.S. imports from Canada could be affected by specific provisions of the new agreement. Much of the value of U.S. agricultural exports is accounted for by fruits and vegetables, which could benefit from tariff reduction. If these commodities are omitted, the value of potentially affected trade is small. However, because trade has been limited by restrictions in the past, reducing restrictions could lead to an overall expansion in trade.

In addition to fruits and vegetables, the agreement could benefit U.S. exports of wine, poultry and eggs, some grains, and high-value and processed products. Canadian exports of storage vegetables (potatoes, onions, and carrots) and beef could also benefit.

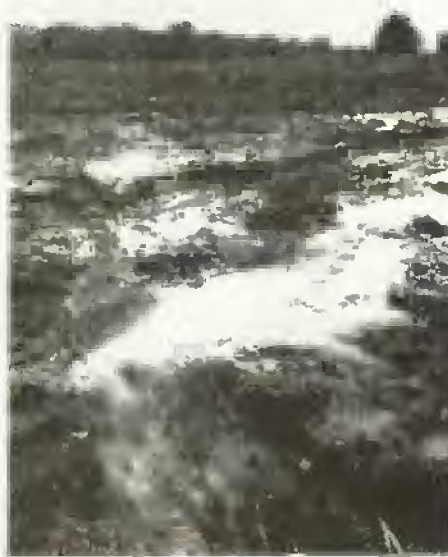
[Carol A. Goodloe and Mary Anne Normile (202) 786-1663]

### **Upcoming Releases from the Agricultural Statistics Board**

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the January/February *Agricultural Outlook* comes off press.

#### **December**

- 1 Egg Products
- 2 Poultry Slaughter
- 3 Dairy Products
- 4 Celery
- 10 Crop Production
- 11 Turkey Hatchery
- 14 Vegetables
- 15 Potato Stocks
- Milk Production
- Cattle on Feed
- 18 Catfish
- 21 Cold Storage
- 23 Eggs, Chickens, & Turkeys
- 28 Livestock Slaughter
- 29 Peanut Stocks & Processing
- 31 Agricultural Prices



## **Resources**

### **WATER QUALITY ACT WILL AFFECT U.S. FARMING**

The Water Quality Act (WQA), passed by Congress last February, expanded the categories of pollutants regulated, including nonpoint-source pollution; increased the scope of water quality regulations to include groundwater; and authorized the appropriation of \$400 million in Federal grants to reduce nonpoint-source pollution.

The Water Quality Act will have an impact on agricultural practices because nonpoint-source pollution is a byproduct of agricultural production. Runoff from agricultural lands contains sediment, nitrogen, phosphorous, pesticides, and other substances that constitute a significant portion of nonpoint-source pollution entering the nation's waterways and estuaries.

Agricultural lands are responsible for about a third of the estimated \$6 billion in offsite damage caused by soil erosion yearly. Leaching of nutrients and pesticides from cropland into groundwater is a problem in some rural areas. The level of nonpoint-source pollution from agricultural land can be reduced by altering production practices.

The WQA differs from prior legislation by requiring States to consider both point- and nonpoint-source pollution in

water quality programs. States are required to conduct an inventory of navigable waters and identify sources of water quality degradation. They are to develop management plans which identify best management practices and enable each State to meet water quality standards of the Environmental Protection Agency.

Because no State has yet completed an inventory of its navigable watersheds and submitted a management program for approval, the extent to which agriculture will be affected by the WQA is uncertain. Most States are considering the use of voluntary compliance measures, combined with training and education programs, demonstration projects, and water quality monitoring.

A few States are examining a regulatory approach in watersheds identified as having persistent and severe pollution. The most frequently mentioned target for both the voluntary and regulatory approaches is limiting soil erosion on agricultural lands to *T*, the level of erosion at which a soil can maintain its productive capacity indefinitely.

The Food Security Act of 1985 contained conservation provisions that complement the WQA. Among these provisions were the Conservation Reserve Program (CRP) and the Conservation Compliance Provision. The WQA and the conservation provisions in the 1985 Farm Act will improve water quality by changing agricultural practices to reduce soil erosion. In addition, the WQA will require agricultural producers to undertake measures to control offsite movement of agricultural chemicals and livestock waste.

How will the WQA and the conservation provisions of the Food Security Act affect agriculture? Some of the effects are as follows:

- We can identify which lands may require treatment in order to meet nonpoint-source targets. (See map in *Agricultural Outlook*, April 1987, page 28.) On much of this land, erosion can be reduced to target levels by altering tillage practices. But, on other sites the crop rotations must be shifted from more erosive crops such as corn and soybeans to less erosive rotations such as hay and pasture.

## Potash Prices Surge

Farmers faced higher potash prices this fall because of dumping duties placed on Canadian potash by the U.S. Government. Prices could rise even higher next spring.

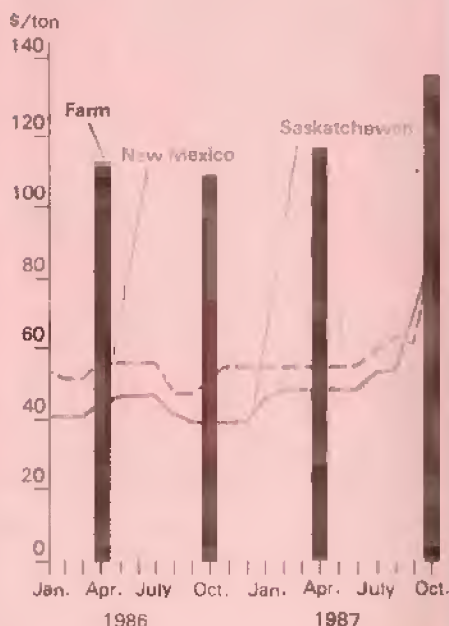
The duties have had widespread effects on domestic potash prices because U.S. farmers depend on Canadian imports for nearly 85 percent of their potash. Farmers paid \$135 per ton in October, 17 percent above spring 1987 and 26 percent above fall 1986.

Wholesale prices have risen even more dramatically, increasing by over 50 percent since July, indicating that fertilizer dealers may be absorbing some of the price increase. Even with this fall's runup in price, though, potash is still selling well below the peak of \$155 per ton observed in 1981 and 1982.

The preliminary dumping ruling by the U.S. Department of Commerce was in response to a petition by two domestic potash producers, who charged that producers in Canada were selling potash in the United States at less than fair market value.

Producers in Canada were assessed dumping margins which added from 9.1 to 85.2 percent to the price at

Potash Prices Up Sharply



which potash is imported. Since the end of August, U.S. potash importers have been required to post bonds or make cash deposits on their U.S. sales. The final ruling on whether the dumping margins will remain in place is expected in February. [Harry Vroomen and Stan Daberkow (202) 786-1456]

- Forty to 45 million acres of cropland are expected to enter the Conservation Reserve Program, and an additional 9 million are not expected to remain in production because they require extensive conservation measures in order to meet the soil erosion targets. Idling this land will cut agricultural production.

In addition, the changes in production practices in areas with erosion levels greater than T will alter crop yields and regional production patterns. In areas where crop rotations must change, or more expensive production practices implemented, net income and agricultural production could be reduced. In the long run, though, reduced erosion will preserve cropland productive capacity.

- The WQA will reduce agricultural chemical use. Some observers are suggesting user taxes on agricultural chemicals. Iowa has im-

posed a tax (75 cents per ton) on nitrogen. Changes in chemical use will alter agricultural yields.

- The soil tolerance target mentioned by many States is more stringent than the standard set by the Conservation Compliance Provision. The WQA sets a goal that agricultural land contributing to nonpoint-source pollution be held at an erosion level less than the tolerance, not just highly erodible land participating in commodity programs.
- Seepage from manure storage facilities contains large quantities of bacteria, nitrogen, and phosphorous, which can contaminate both surface waterways and groundwater. Livestock operations with more than 300 animal units are defined as point sources which require discharge permits if they are adjacent to waterways.

However, the potential for groundwater contamination was not considered when the discharge permits were issued.

Much of the nation's livestock production is on farms with less than 300 animal units, and runoff and groundwater contamination from these smaller operations is considered nonpoint-source pollution in the WQA. Effluent from these smaller operations constitutes a significant problem and will be affected by the WQA. Management of animal wastes in a manner that does not degrade surface or groundwater increases the cost of livestock production.

Agriculture contributes only one-third of the total U.S. nonpoint-source pollution. The nonagricultural sources of nonpoint-source pollution need to be identified lest agriculture, as a large and visible source, is called upon to bear a disproportionate share of the burden. [Bengt Hyberg (202) 786-1404]





## Fundamental Changes Ahead For the Farm Credit System

The farm crisis of the early 1980's produced ongoing problems for the Farm Credit System (FCS). After two previous Government attempts to keep the system from bankruptcy, Congress is considering legislation to provide Federal financial assistance to the FCS and put its assets on a firmer, more commercial basis. While this legislation addresses the financial difficulty of the FCS, it has raised questions about whether the system's fundamental cooperative nature is being changed. The FCS took on its present form and functions during the Depression. It is a federation of individual associations and banks organized as cooperatives.

Individual associations within the 12 FCS districts make short- and long-term loans to farmers. Within each district there are three banks: a Federal Land Bank (FLB) that specializes in farmland loans, a Federal Intermediate Credit Bank (FICB) that specializes in operating and intermediate credit, and a Bank for Cooperatives (BC) that lends to farmer-owned supply, marketing, and processing cooperatives. Over the past 50 years, the FCS became the largest lender to agriculture, particularly for real estate purchases. At its peak in 1983, the FCS had outstanding loans totaling \$82 billion, representing one-third of farm debt.

### *Debt Loss Increases, Then Loan Volume Declines*

Farmers' financial difficulties led the FCS to announce in autumn 1985 that it had some \$13 billion in loans on which farmers might default over the next few years, and

that its internal resources would be inadequate to cover the losses. The system reported losses of \$2.8 billion in 1985 and \$1.8 billion in 1986.

Compounding the problem of losses has been a decline in loan volume. Over the last 2 years, as farmers' cash flow has improved, loan volume at the FCS has fallen; farmers are paying off their debt without taking out new FCS loans. Consequently, loan volume dropped roughly \$1 billion per month from the end of 1985 to date, although the rate of decline appears to be slowing.

The Federal Government has aided the FCS twice in the last 3 years. The first instance, in 1985, resulted in a major restructuring of the powers and responsibility of the system's regulator, the Farm Credit Administration (FCA). In addition, a new bank, the Farm Credit System Capital Corporation, was created to act as a source of financial assistance for troubled institutions. A mechanism was also created to provide direct Federal financial help to the FCS if it is deemed necessary by FCA.

In 1986, Congress again acted to provide relief to the FCS by allowing its institutions to deviate from generally accepted accounting practices. The change was made to help FCS institutions absorb the losses from loans in arrears or in foreclosure.

These losses have eroded the system's internal reserves. Only the presence of over \$6 billion in surplus in the fall of 1985 has allowed the FCS to continue operating this long. However, the reserves are not uniformly distributed, nor have the losses been distributed in the same pattern as the reserves. As a result, a number of FCS institutions are now in danger of financial failure, even though the system, collectively, still had a surplus over \$1.2 billion as of September 30, 1987.

In April 1987, the FCS reported a surprisingly small loss of \$155 million for the first quarter, based upon improving economic trends within the farm sector. Financial results for the second quarter showed losses of only \$46 million, and recently released information for the third quarter shows a profit of \$4 million. Since the FCS's request for Federal assistance had forecast total 1987 losses of \$1.28 billion, financial reports for the first 9 months of 1987 raise questions about the earlier projections.

### *Despite Recent Improvement, System Still Has Fundamental Problems*

The most recent financial reports clearly portray an improving position for the FCS. However, the underlying trends are far less rosy. The system continues to carry a large volume of high-cost debt. With generally lower market interest rates and competition from other lenders, this debt has held net interest income for the system very low.

Even with minimal interest rate margins on FCS loans, the system's loan volume continues to decline, making it extremely difficult to generate the retained earnings needed to keep financially troubled FCS institutions from insolvency. Thus, the system still desperately needs assistance.

The improved profits in the middle of this year were due to failing banks' liquidating assets to preserve their

## **Rates and Risk On FCS Bonds**

Institutions in the Farm Credit System issue short- and long-term bonds to finance farm mortgages and operating loans. Unlike commercial banks or savings and loans that rely on deposits, FCS institutions rely on the bond market as a source of funds.

The FCS currently faces a high cost of funding because it issued long-term bonds in the early 1980's when interest rates were several percentage points higher than they are now. This means that to be competitive today with other institutions, the FCS must offer loans at a price very close to, and in some cases even less than, what it is still paying for the funds.

Competitive interest rates and timely payment of bond interest and principal are essential if the FCS is to raise capital in the bond market. Since the bond market places a cost premium on securities based on the riskiness of the collateral backing them, the FCS finds the cost of issuing securities rising when the quality of its assets (performance of its loans) is decreasing. One would expect the bond market to reflect the drop in the quality of the FCS loan portfolio by driving a wedge between the cost of FCS bonds and the cost of bonds from other, less risky agencies, such as the Federal National Mortgage Association (FNMA).

### ***Risk Premium Stable on Distant-Maturity FCS Bonds***

But this has not happened for long-term, distant-maturity FCS bonds. While FCS long-term bonds continue to sell for considerably less than Treasury bonds, there has been no dramatic change during the last year. At the same time, the spread between FCS and FNMA bonds with distant maturities has been relatively small. It is therefore likely that swings seen in these FCS yields and spreads over Treasury yields were due to factors other than FCS risk.

FCS bonds with near maturities are a different story. Near-maturity FNMA bonds have shown relatively small yield differences from Treasuries over the past year, while comparable FCS bonds have had large spreads. It is likely that the large FCS-Treasury differential represents a short-term risk premium on FCS issuances due to investor concern about timely payment of FCS interest and principal.

### ***Short-Term Bond Surfeit Has Affected Long-Term Bond Market***

In the last 2 years, near-maturity bond yields have reached new highs each time an FCS financial status report was released. However, for an extended period after the second-quarter 1987 report was released, spreads declined somewhat. This drop was due both to a smaller-than-expected loan loss for the first quarter and to the announcement that the FCS passed the \$2 billion mark for restructuring troubled loans this year; both events helped give investors confidence that the quality of FCS assets will improve. An additional factor is that during this time Congress was actively debating ways to bail out the system.

Another factor contributing to the yield spread on near-maturity bonds has been the very large amount of short-term debt that the FCS has issued. Because the FCS faces an uncertain future, it has not been able to issue long-term bonds at a favorable rate. The system has relied exclu-

sively on short-term debt to meet its capital requirements during the past couple of years. Since there was a surplus of these FCS short-term bonds available, their price went down and, correspondingly, their yield went up.

The short-term market became so saturated that by September 23, 1987, yields reached 7.375 percent on new 3-month issues—the highest rate ever in the 15-month history of the issue. The yield was 7.90 percent on 6-month issues, the highest rate paid since December 1985. It is likely that the market for long-term FCS bonds nearing maturity has been depressed by this surplus of short-term bonds.

### ***Cost of Funding Rising***

To the FCS, short-term bonds have the disadvantage of being closely connected with day-to-day market activity. The cost of funding using short-term bonds is unpredictable, because the bond issue's interest rate must be set close to current yields of comparable securities.

The rising interest rates of the past year have had the greatest effect on the cost of funding for the Federal Intermediate Credit Banks, which specialize in loans to Production Credit Associations. This is because FICB's have the greatest portion of their portfolio in short-term obligations.

From March through mid-September, the FICB's saw their average cost of funds go up three-quarters of a percentage point, with a rise of almost a fifth of a point occurring during late August and early September. This increase pulled their average cost of funds up to 8.14 percent.

At the other end of the spectrum are the Federal Land Banks, specializing in long-term farm mortgages and longer term bond issues. They have not experienced much change in their average cost of funds, staying between 10.15 and 10.25 percent for the entire year.

Between these two extremes are the Banks for Cooperatives, which specialize in lending to farm cooperatives. They have seen a rise of three-fifths of a percent since last March, bringing them up to an average cost of 8 percent.

The moderate size of the interest rate differential between long-term FCS and FNMA bonds during the past year suggests that most investors believe the system will not default on its securities. One reason frequently noted is that the system's implied Government-agency status calms investor fears.

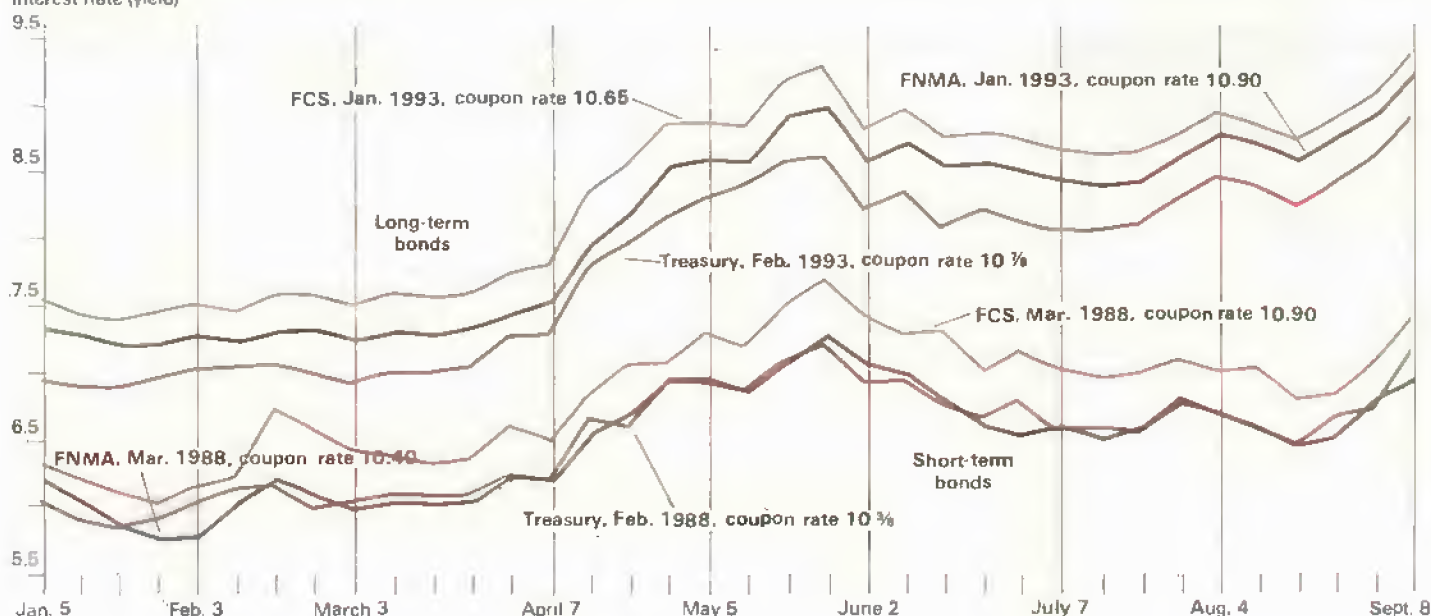
Nevertheless, the increased differential generated 2 years ago when news of FCS problems broke has not disappeared. This premium persists because of the FCS's ongoing struggle to remain solvent, and the continued struggle of the farm sector itself.

In the wake of the October 19 stock market dive, investors have fled from stocks to bonds, driving bond prices up and yields down. This means the FCS now faces lower funding costs than anticipated. Offsetting this serendipity is the problem that it may be necessary to lower the price of FCS loans to farmers, in order to remain competitive with other lenders. In this case, the spread between the FCS's cost of funds and the price at which it can sell them may not widen. Since the long-term bonds issued in the early 1980's with very high coupon rates are still outstanding, the net change in the system's position may not be large. [Merritt Hughes (202) 786-1889]



## FCS Must Pay Risk Premium on Its Short-Term Bonds

Interest Rate (yield)



short-term viability. While the FCS has made modest improvements in reducing the volume of troubled farm loans, loan demand continued to decline and the ratio of troubled loans to total loans has not changed significantly. In a number of banks, borrower stock (the stock each borrower is required to purchase from the FCS whenever a loan is taken out) is trading for well below face value, and there is little prospect of a recovery without Federal assistance.

In March 1987, the FCS asked the Federal Government for \$6 billion in direct assistance. In response, both the House and the Senate began to develop bills to resolve the FCS's difficulties. Critical elements sought by the bill-writers included the following:

- providing enough financial aid to the FCS so it can absorb losses in its portfolio and remain a viable lender to farmers,
- ensuring that existing borrower stock is protected from the system's losses,
- requiring the FCS to examine delinquent borrowers' financial condition and restructure loans, when restructuring is cheaper than foreclosing,
- providing the FCS with the ability to generate capital over time, instead of relying on borrowers' stock, and
- providing a means for preventing future losses by establishing a central reserve or insurance fund which can be used prior to Federal Government assistance.

A number of issues not directly related to providing assistance to the FCS were added to the legislative agenda. Two major ones were the development of a secondary market for agricultural mortgages, and reform of the Farmers' Home Administration (FmHA) procedures for dealing with delinquent FmHA borrowers. These were included on the grounds that general reform of agricultural lending markets was required, not just assistance to the FCS.

Bill-writers were also concerned with budget impacts of any new legislation and with securing Federal control over the use of any Federal funds released to the FCS.

### House Bill Would Restructure System

In November, the House of Representatives passed H.R. 3030, requiring FCS reorganization. The major provisions of the House bill are as follows:

- borrower stock is guaranteed for the next 5 years,
- the FCS is required to restructure delinquent loans on which the cost of foreclosure exceeds the cost of restructuring,
- borrower rights are expanded to ensure that farmers are treated fairly by the FCS,
- a Temporary Assistance Board is created to supervise the operations of institutions requiring financial assistance over the next 5 years,
- \$2.5 billion in direct Federal assistance is made available in 1988 and authority is given for appropriations in subsequent years, with funds provided to the FCS to be offset through Federal sales of FmHA Rural Development Insurance Fund assets,
- a central reserve is established to provide a second line of defense for creditors of FCS institutions,
- major reorganization of the FCS is required, with an expanded role for local associations (Production Credit Association and Federal Land Bank Association), dissolution of existing district banks (Federal Land Bank, Federal Intermediate Credit Bank, and Bank for Cooperatives), consolidation of districts, and authority to merge institutions,
- a secondary market for agricultural mortgages is created within the FCS to serve all agricultural lenders, and
- borrowers' rights are expanded at FmHA.

## **Senate Bill Features Off-Budget Financing**

The pending Senate Bill, S. 1665, also deals with these major elements. In addition to the provisions of the House bill, it includes features to:

- require that over time the FCS move away from borrower stock as the primary means of funding the system, and move toward more permanent sources of capital, such as preferred stock sold to investors and fee income, and
- create a mechanism for off-budget financing of Federal assistance to the FCS, by allowing the sale of Government-guaranteed bonds.

While the House and Senate bills contain similar provisions, they differ in a number of ways. The House bill is more definitive as to how the FCS is to be restructured.

Provisions in H.R. 3030 require that no more than six service center banks be created to support associations by consolidating funding needs. These new banks would have no supervisory or lending authority, unlike existing district banks. In turn, associations (PCA's and FLBA's) would take over the function of the current district banks. The intent of the House bill is to concentrate lending decisions at the association level and centralize fundraising. The Senate bill allows mergers and dissolution of system institutions, subject to informed borrower consent, but does not encourage the massive restructuring prescribed in the House bill.

The financial assistance package in the Senate bill places more authority and flexibility with the proposed Temporary Assistance Board than does the House bill and relies to a large extent on off-budget financing. By contrast, the House bill provides assistance under specific rules through annual appropriations financed by the sale of FmHA assets.

## **Both Bills Change Means of Capitalizing FCS**

New means of capitalizing the FCS are addressed in both pieces of legislation. But, the Senate bill allows the potential for the FCS to move further away from traditional cooperative organization principles, by allowing the sale of transferable stock to investors. It also requires the FCS to reduce the use of borrower stock over time and replace it with fee income, either through loan origination charges or increased interest margins. H.R. 3030 allows institutions flexibility in developing permanent capital, including the use of preferred stock, but is less specific in requiring changes in capitalization methods.

The secondary market in each bill provides an opportunity for farm lenders to make loans, pool them, and sell securities backed by the loans to investors. This procedure allows matching of lenders who are willing to take on long-term, fixed-rate debt with farmers who wish to secure such mortgages. Farmers Home provisions of the Senate bill stipulate that the Secretary of Agriculture apply a consistent restructuring policy nationally and require timely decisions to foreclose or restructure those borrowers whose loans are delinquent. Both bills also establish a package of borrower rights and provide additional benefits to farmers who lose their farms through foreclosure or voluntary conveyance to FmHA.

## **With Secondary Market for Farm Loans, Commercial Banks Will Make Long-Term Loans**

The structure of the Farm Credit System and the environment in which it operates will change significantly in the future. In the near term, the financial condition of the FCS will be most sensitive to farmers' demand for credit.

The FCS is a demand-driven institution, and to the extent that farmers continue to curtail their use of credit, it will face continued pressure to contract. Higher interest costs, large Government payments to farmers, and producers' uncertainty about long-term developments in agriculture all will help limit the demand for farm credit.

Similarly, the actions of competing farm lenders will have a major effect on the FCS. Creation of a secondary market for farm loans should increase the ability of commercial banks to originate long-term loans to farmers. This, in conjunction with banks' existing short-term lending, will allow them to become one-stop sources of credit.

Insurance companies have been another major source of credit for farmers. The secondary market could either increase or decrease the role of life insurance companies as originators of farmland loans. Their role could increase from the greater liquidity provided by the secondary market, or it could decrease if the companies choose to participate in the farmland loan market by purchasing securities rather than by making loans directly.

FmHA lending activities, which are separate from those of the FCS, also affect demand for FCS loans. Under current legislation, the FmHA is phasing out its direct lending program and moving toward guarantees for loans originated by other lenders.

If this continues, it creates an opportunity for the FCS and other lenders to expand their loan volume into higher risk borrowers without assuming the risk. FmHA's guarantees on loan principal and its withdrawal from direct lending both serve to stimulate loan volume of other lenders.

## **Local Control & Cooperative Nature Of FCS May Change**

The legislation in Congress would provide the FCS with the financial capacity to absorb its projected losses and remain a source of credit for farmers. However, certain proposed changes may result in an institution significantly different from the current FCS.

Local control by farmer/borrowers and access to low-cost credit have long been two main characteristics of FCS assistance. While the reorganization of the FCS appears to strengthen local control by limiting the authority of the banks and strengthening borrower rights, other features of the legislation may reduce the cooperative nature of the FCS. Both bills create the potential for reducing farmers' control of the FCS.



For example, the compulsory reorganization required by H.R. 3030 removes the district banks and vests authority in the associations. This results in a single association serving several States. Individual borrowers will face major obstacles in gaining a voice in the management of their association because of its large size.

Similarly, S. 1665 allows the FCS to issue transferable preferred stock as a means of capitalization. Such stock would be marketable only if it bore a relatively large dividend which was cumulative. Dividends would create a significant claim on the FCS's future income and thus require higher interest payments by farmers.

Part of the argument for assisting the FCS is that it provides an alternative to investor-owned, profit-oriented lending institutions, thereby helping to keep agricultural capital markets competitive. To the extent that the FCS gives up its cooperative nature and loses touch with its membership, it fails in this task.

The FCS continues to be restricted to lending to agriculture and related activities, leaving it exposed to farm income fluctuations. The creation of a secondary market and the problems of implementing schemes for adequate asset-liability management will further complicate its operations.

The FCS's survival requires rebuilding the system's capital, which can only be accomplished by generating positive earnings. In this process, the FCS will have to balance the need for additional earnings from farmers against reduced service to members and lower loan volumes. While the mandate of the FCS is not changed in the new legislation, future pressures on the system to rebuild capital and repay the Government may lead to decisions that are financially prudent but blur the distinction between the FCS and commercial banks. [David Freshwater (202) 786-1885]



## The Long-Range Outlook for China's Agricultural Production & Trade

---

After expanding rapidly from the late 1970's to 1984, China's agricultural production has slowed to a more normal growth rate in the last couple of years. With domestic demand increasing, the country's agricultural commodity exports—particularly grain—are expected to shrink. China should be a net grain importer in 1987, after only a 2-year status as a net grain exporter.

### *Phenomenal Growth Has Slowed*

China's total agricultural output grew by more than 9 percent per year between 1978 and 1984, then slowed to about 3 percent annually starting from 1985. In the two decades prior to 1978, in contrast, there was virtually no growth.

In 1979, the Chinese Government began a revolutionary program to reorganize farm production units and change rural institutions to revitalize the rural economy. The program eventually included disbanding communes and instituting a contract system. Farm households began to plan their crops, make economic decisions, and allocate resources to raise output, reduce costs, and maximize income. Farm families responded positively to the initiative, and output and income rose sharply.

Government procurement prices were increased in 1979 for grains and livestock products. Private plots in poor areas were allowed to expand in 1981, and rural trade markets (previously known as free markets) were resumed. These programs stimulated farmers' enthusiasm to produce more, even before the commune system was ended.

The commune system was dismantled at the end of 1984, and the Government reduced the quantity of goods purchased through the state procurement system. Farm households now sell output to both the Government and local markets. Grains, oilseeds, and livestock products are available in rural trade markets all over the country.

In large measure, the farm output growth achieved since the end of the 1970's reflects one-time gains from restructuring an inefficient farming system, which lacked incentives for individual farmers and households. Many reasons have been cited for the growth slowdown, particularly grains, since 1985, including continuous decline in grain crop area; the diversion of inputs, especially fertilizer, from grain crops to other uses; unfavorable input prices; and bad weather.

### **Consumption Continues To Expand**

Along with the rapid growth in farm output and in both farm and urban income, China's per capita consumption of agricultural commodities has increased markedly since 1978. This is in contrast to the previous two decades, which saw little expansion of commodity consumption. For instance, per capita grain consumption was 198 kilograms in 1958 and 196 kilograms in 1978. But, it rose to 254 in 1985, an increase of over 30 percent in less than a decade. Per capita consumption of other major agricultural commodities expanded even faster.

Per capita consumption of livestock products is still low compared with world averages, despite impressive increases in the last decade. This is also true for vegetable oil, sugar, and cloth consumption.

For most of the last 37 years, China was a net exporter of farm products. As recently as 1978, agricultural exports—including live animals, livestock products, rice, fruit, and vegetables—accounted for almost one-third of total exports. Main agricultural imports were wheat, corn, and cotton. However, China sharply increased agricultural imports in the late 1970's and the early 1980's because of the rural reforms.

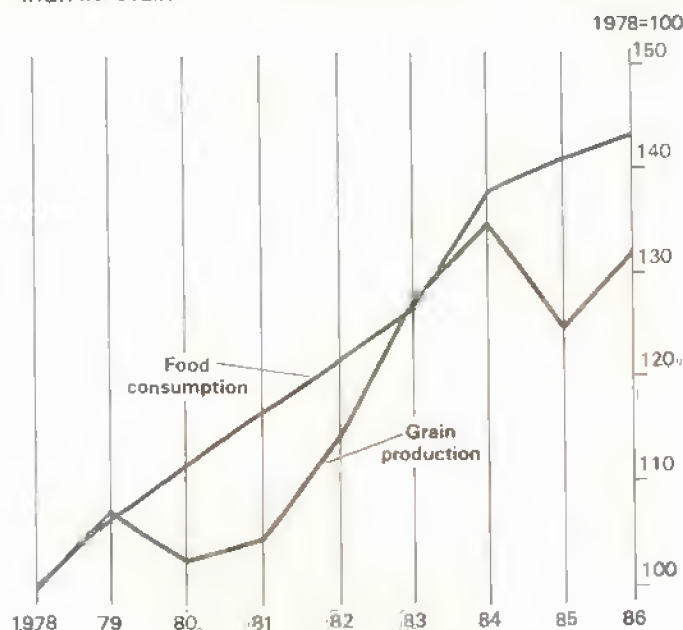
Nevertheless, Chinese policymakers were never committed to permanently increasing reliance on foreign sources for basic commodities. The import increase during the late 1970's and early 1980's was considered temporary.

And in fact, it was short lived. Imports of basic commodities peaked during 1980 and 1982 and then plummeted in 1983 and 1984, as rapid growth of domestic production peaked in 1984. Since 1984, China has returned to being a net agricultural exporter, as it was in most of the 1960's and 1970's. Its agricultural trade surplus has grown bigger in the past 3 years.

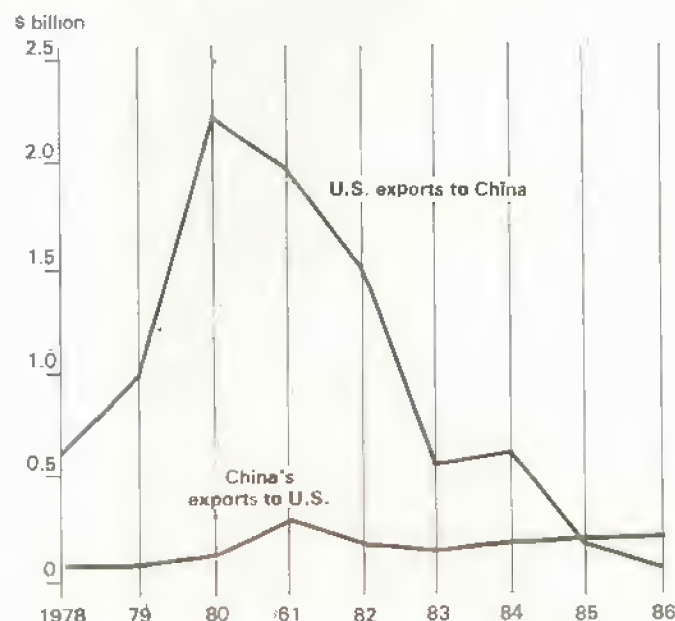
### **Future Output Expansion Will Not Be As Easy**

Higher yields, which generated almost all of the growth in grain production for the last decade, will be the sole source for future farm output growth. Arable area has continuously declined in the 1980's because of nonfarm use, such as expansion of housing, factories, and road construction, and it will continue to decline because there is little land that can be economically reclaimed. In the

**China's Food Consumption Rising Faster Than Its Grain Production**



**U.S. Exports to China Have Fallen During 1980's**



last couple of years, area sown to crops, including grains, has been maintained only by increased multiple cropping. During 1978-84, yield increases for wheat, rice, coarse grains, and oilseed crops were rapid, largely because of greater and more efficient use of inputs, improved varieties, better farm management, and more specialization. These changes were the result of the new policies and reform programs implemented after 1978.

The new policies, particularly the household contract system, have already produced most of their benefits. Input increases, particularly good quality fertilizer and other agricultural chemicals, will be much slower than in the early 1980's.



# Major Commodity Output in China, 1978-87

Commodity	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Million tons										
Rice, unmilled	136.9	143.8	139.9	144.0	161.6	168.9	178.3	168.6	172.5	175.0
Wheat	53.8	62.7	55.2	59.6	68.4	81.4	87.8	85.8	90.3	87.0
Coarse grain	78.6	82.4	82.4	79.4	81.8	91.6	96.2	82.3	88.7	96.2
Cotton	2.2	2.2	2.7	3.0	3.6	4.6	6.3	4.1	3.5	3.9
Oilseeds	16.4	17.4	20.2	24.5	27.1	30.9	31.1	31.6	31.0	32.6
Tobacco, flue-cured	1.1	0.8	0.7	1.3	1.8	1.2	1.5	2.1	1.4	1.5
Sugarcane & sugar beets	23.8	24.6	29.1	36.0	43.6	40.3	47.8	60.5	58.6	58.4
Pork	7.9	10.0	11.3	11.9	12.7	13.2	11.4	16.5	18.0	17.5
Beef & mutton	0.7	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3

1987 estimated and Oilseeds include soybeans, cottonseed, peanuts, rapeseed, and sunflowerseed.

This indicates to China's leaders that farm output will have to continue increasing mainly through better yields. Recent difficulties in achieving higher yields have led China's policymakers to lower the 1990 grain output target from 450 million tons to 425-450 million.

## Marketing and Price Systems Need Reform

China's leaders also face reform of the marketing and price systems. The old Government procurement system cannot deal efficiently with the rapid growth of farm products and the rising importance of consumer demand. Unless the system changes, producer incentives will be diminished, consumer dissatisfaction will grow, and budget subsidies on farm products will strain Government revenues.

Without reform toward a rational price system, China's grain production will not be profitable. Output increases will be difficult to achieve, allocation of farm resources will be inefficient, and the composition of crop and livestock production will be irrational.

China's planners must increase investment in agricultural infrastructure. Since the household contract system was implemented, Government investment in the farming sector has fallen dramatically, and household investment has also been low. Continuous lack of investment in irrigation, land improvement, and farm mechanization will deprive the farms of growth.

Other problems face China's agriculture. Better market information is needed to compensate for reduced central control. Also, China has shortages of most forms of energy, including diesel fuel and electricity. A host of problems, from inadequate transportation to livestock breeding, will need attention.

## Production and Trade Prospects Are Stabilizing

Farm output is expected to grow an average of 3 percent annually for the rest of the 1980's and the 1990's, roughly the same rate as in the past 2 years. Livestock consumption of grain should gradually level off in the next few years, but industrial use of grain likely will increase.

## China's Agricultural Trade Balance

	1981	1982	1983	1984	1985	1986
\$ billion						
Exports	3,979	3,729	3,833	4,512	5,472	4,099
Imports	4,686	5,446	4,131	2,856	2,308	2,734
Net exports	(1,707)	(1,717)	(1,298)	1,656	3,164	1,365

( ) indicates negative.

Sources: Trade and Price Statistical Information, 1957-1983, and China's Customs Statistics, 1984-86.

## U.S. Agricultural Exports to China

Year 1/	Wheat	Corn	Soybeans	Cotton	Total value
-----1,000 tons----- \$ million					
1977/78	914	0	47	122	352.4
1978/79	2,454	2,754	142	141	884.1
1979/80	4,036	1,788	810	514	1,936.6
1980/81	7,693	725	472	254	2,117.7
1981/82	8,221	1,117	370	186	1,819.0
1982/83	1,921	2,161	0	2	546.2
1983/84	4,579	0	0	3	692.3
1984/85	1,373	0	0	1	238.8
1985/86	142	0	187	0	83.2
1986/87	898	1,090	250	1	234.8

1/ Year ending September 30.

Source: U.S. Bureau of Census.

Production and trade prospects are summarized as follows:

**Wheat.**—China's demand for wheat will continue to grow fast. This growth, coupled with slowing production gains, makes it likely that imports will begin to rise this year. Wheat demand will grow as income rises. Imports could expand for the rest of the century. It is also likely that the Chinese Government will regulate wheat consumption to slow down import expansion.

**Rice.**—Rice output peaked in 1984, and consumption is slowing. Rice exports have so far been low, and Chinese officials suggest that surplus rice could be used for feed manufacturing in South China. Otherwise, China may well provide some unpleasant surprises for other rice exporters in international markets.

**Coarse grains.**—This year's coarse grain output could match the record 96.2 million tons harvested in 1984. Consumption has declined in recent years as consumers have shifted to wheat, rice, and meat. However, the livestock sector has demanded increasing amounts of coarse grain, particularly corn, and pressured the Government to reduce corn exports to Asian markets, especially in the past couple of years when corn production has been below par. China's plans, which call for expanding mixed feed manufacturing from the current 18 million tons to 50 million in 1990 and 100-120 million in 2000, will increase domestic demand for coarse grains. So, although corn exports may well continue, they are expected to diminish gradually.

Because of the poor transportation system inside China, some corn will continue to be imported for livestock in the southern part of the country. Internal transfer of corn from the northeast region is too costly. A large quantity of corn imports is unlikely, however, because foreign exchange reserves are scarce and policymakers are not inclined to import large amounts.

**Soybeans and soybean products.**—Soybean production in China has shown steady but slow growth. Production will be encouraged for use in animal feeds. Consumption

of soybean products has grown rapidly in recent years because of rising incomes. Total demand for soybeans and soybean products will increase. Soybean and soybean meal exports have expanded in the last few years, but domestic demand growth will eventually limit export supplies. China's net vegetable oil position has significantly increased in recent years because of growth in domestic demand.

**Cotton.**—Supplies were so far above demand by 1983 that China not only started exporting cotton, but also began to restrict output in 1985. However, an unexpected surge in domestic demand and successful export efforts have led the country to boost output for the rest of the 1980's. China will continue to export cotton.

**Other agricultural commodities.**—Consumer tastes in China have diversified significantly because of sharp increases in income and greater diversity in products grown. More sophisticated tastes spurred development of the food processing industry. Demand for items such as canned meat and beer grew over 200 percent during 1981-85. Products introduced in the last few years include potato chips, fruit juice, soybean milk, cola drinks, infant milk powder, and ice cream bars. Oilseed and sugar processing have also advanced remarkably.

China's food processing industry is expected to grow more than 9 percent annually under the Seventh Five-Year Plan (1986-90). The industry likely will concentrate on nutritious and high-quality foodstuffs to meet varied tastes and earn more foreign exchange. China is expected aggressively to develop and produce goods such as beer and canned items to compete in the international market. The Government will also continue to seek advanced technology and specialized equipment needed in modernizing food processing and packing.

The dramatic changes in China's agricultural production and trade are apparently over, but the nation will continue to play an important role in world agricultural markets. Because of the slowing growth of agricultural output and increasing demand for basic commodities, China's position as a potential agricultural exporter, particularly of major commodities, is gradually diminishing. But, the country may provide new competition in international markets, especially for processed food.  
[Francis C. Tuan (202) 786-1616]



# Statistical Indicators

## Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1987					1988			
	I	II	III	IV F	Annual F	I F	II F	III F	Annual F
Prices received by farmers (1977=100)	122	128	128	125	126	--	--	--	--
Livestock & products	143	148	151	146	147	139	--	--	137
Crops	100	107	105	106	104	--	--	--	--
Prices paid by farmers, (1977=100)									
Prod. items	143	147	149	147	147	151	--	--	149
Commodities & services, int., taxes, & wages	159	162	164	163	162	166	--	--	166
Cash receipts (\$ bil) 1/	130	128	135	136	131-133	--	--	--	--
Livestock (\$ bil)	73	72	78	74	73-75	--	--	--	--
Crops (\$ bil)	57	56	59	64	56-58	--	--	--	--
Market basket (1967=100)									
Retail cost	299	303	300	298	300	--	--	--	--
Farm value	234	245	235	230	236	--	--	--	--
Spread	337	336	337	337	337	--	--	--	--
Farm value/retail cost (%)	29	30	30	30	30	--	--	--	--
Retail prices (1967=100)									
Food	330	332	335	334	333	--	--	--	--
At home	316	319	319	319	318	--	--	--	--
Away-from home	370	372	378	376	375	--	--	--	--
Agricultural exports (\$ bil) 2/	6.9	6.5	6.9	8.0	27.9	8.0	7.1	--	--
Agricultural imports (\$ bil) 2/	5.5	5.3	4.7	4.8	20.6	5.0	4.8	--	--
Production: *									
Red meat (mil lb)	9,485	9,238	9,624	9,865	38,212	9,660	9,595	9,730	38,730
Poultry (mil lb)	4,533	4,932	5,200	5,030	19,695	4,865	5,300	5,385	20,675
Eggs (mil doz)	1,443	1,438	1,439	1,480	5,799	1,440	1,440	1,415	5,760
Milk (bil lb)	34.9	37.3	35.8	34.1	142.1	35.6	37.8	36.0	144.0
Consumption, per capita:									
Red meat and poultry (lbs)	52.4	52.9	54.3	56.5	216.1	54.2	55.3	56.2	222.5
Corn beginning stocks (mil bu) 3/	10,304.1	8,248.2	6,332.2	4,882.0	4,882.0	--	--	--	--
Corn use (mil bu) 3/	2,056.2	1,916.5	1,450.7	--	7,412.3	--	--	--	--
Prices: 4/									
Choice steers--Omaha (\$/cwt)	60.46	68.60	65.04	62-66	64-65	61-67	64-70	62-68	62-68
Barrows and gilts--7 wts. (\$/cwt)	48.11	56.18	58.97	42-48	52-53	41-47	37-43	37-43	37-43
Broilers--12-city (cts/lb)	50.0	48.2	48.7	42-46	47-48	40-46	41-47	41-47	40-46
Eggs--NY Gr. A large (cts/doz)	64.8	58.9	63.9	62-66	62-63	60-66	57-63	60-66	60-66
Milk--all at plant (\$/cwt)	12.90	12.07	12.33	12.80-	12.50-	12.00-	11.20-	11.20-	11.70-
				13.20	12.65	12.80	12.00	12.00	12.50
Wheat--Kansas City HRW (\$/bu)	2.80	2.94	2.65	--	--	--	--	--	--
Corn--Chicago (\$/bu)	1.56	1.82	1.68	--	--	--	--	--	--
Soybeans--Chicago (\$/bu)	4.87	5.37	5.17	--	--	--	--	--	--
Cotton--avg. spot mkt. (cts/lb)	55.5	64.7	73.5	--	--	--	--	--	--
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
Gross cash income (\$ bil)	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	151-153
Gross cash expenses (\$ bil)	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	96-98
Net cash income (\$ bil)	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	53-57
Net farm income (\$ bil)	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	41-45
Farm real estate values (1977=100) 5/	125	145	158	157	148	146	128	112	103

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ As of February 1. F = forecast. \* = commercial production.

Table 2.—U.S. Gross National Product &amp; Related Data

	Annual			1986		1987		
	1984	1985	1986	III	IV	I	II	III P
\$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,772.2	4,010.3	4,235.0	4,265.9	4,288.1	4,377.7	4,445.1	4,512.0
Personal consumption expenditures	2,430.5	2,629.4	2,799.8	2,837.1	2,858.6	2,893.8	2,943.7	3,003.7
Durable goods	335.5	368.7	402.4	427.6	419.8	396.1	409.0	432.6
Nondurable goods	867.3	913.1	939.4	940.0	946.3	969.9	982.1	988.1
Clothing & shoes	146.7	157.2	167.5	169.0	169.5	174.0	175.8	178.9
Food & beverages	448.5	472.8	497.8	499.6	507.5	514.8	515.0	516.6
Services	1,227.6	1,347.5	1,458.0	1,469.5	1,492.4	1,527.7	1,552.6	1,583.0
Gross private domestic investment	664.8	641.6	671.0	660.8	660.2	699.9	702.6	696.5
Fixed investment	597.1	631.6	655.2	657.3	666.6	648.2	662.3	681.1
Change in business inventories	67.7	10.0	15.7	3.5	-6.4	51.6	40.3	15.5
Net exports of goods & services	-58.9	-79.2	-105.5	-110.5	-116.9	-112.2	-118.4	-121.7
Government purchases of goods & services	735.9	818.6	869.7	878.5	886.3	896.2	917.1	933.5
1982 \$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,501.4	3,607.5	3,713.3	3,718.0	3,731.5	3,772.2	3,795.3	3,831.2
Personal consumption expenditures	2,249.3	2,352.6	2,450.5	2,477.5	2,480.5	2,475.9	2,487.5	2,517.0
Durable goods	323.1	352.7	383.5	405.5	399.0	375.9	385.4	403.3
Nondurable goods	825.9	849.5	877.2	879.8	880.3	883.2	879.0	878.4
Clothing & shoes	142.2	147.9	158.0	160.4	158.4	160.4	157.3	162.5
Food & beverages	422.8	436.5	444.9	442.2	444.0	447.5	441.6	439.9
Services	1,100.3	1,150.4	1,189.8	1,192.2	1,201.1	1,216.9	1,223.1	1,235.4
Gross private domestic investment	658.4	636.1	654.0	645.0	631.0	671.8	673.7	676.5
Fixed investment	596.1	628.7	640.2	638.8	645.4	624.2	634.7	658.4
Change in business inventories	62.3	7.4	13.8	6.1	-14.4	47.6	39.0	18.1
Net exports of goods & services	-84.0	-108.2	-145.8	-161.6	-151.8	-135.2	-132.7	-137.9
Government purchases of goods & services	677.7	726.9	754.5	757.2	771.8	759.6	766.7	775.5
GNP implicit price deflator								
% change	3.7	3.2	2.6	3.6	.7	4.2	3.5	2.4
Disposable personal income (\$bil)	2,668.6	2,841.1	3,022.1	3,038.2	3,061.6	3,125.9	3,130.6	3,193.5
Disposable per. income (1982 \$bil)	2,469.8	2,542.2	2,645.1	2,653.2	2,656.7	2,674.6	2,645.5	2,676.1
Per capita disposable per. income (\$)	11,257	11,872	12,508	12,560	12,626	12,865	12,858	13,083
Per capita dis. per. income (1982 \$)	10,419	10,622	10,947	10,968	10,956	11,008	10,865	10,963
U.S. population, total, incl. military abroad (mil)	237.1	239.3	241.6	241.9	242.5	243.0	243.5	244.1
Civilian population (mil)	234.9	237.0	239.4	239.6	240.2	240.7	241.3	241.8
	Annual			1986		1987		
	1984	1985	1986	Sept	June	July	Aug	Sept P
Monthly data seasonally adjusted								
Industrial production (1977=100)	121.4	123.8	125.1	124.5	129.1	130.6	131.0	131.2
Leading economic indicators (1967=100)	165.3	168.6	179.3	179.9	190.8	191.5	192.6	192.5
Civilian employment (mil. persons)	105.0	107.2	109.6	110.0	112.2	112.7	113.1	112.8
Civilian unemployment rate (%)	7.5	7.2	7.0	7.0	6.1	6.0	6.0	5.9
Personal income (\$ bil annual rate)	3,108.7	3,327.0	3,534.3	3,567.5	3,715.3	3,737.2	3,758.2	3,783.6
Money stock-M2 (daily avg) (\$bil) 1/	2,373.7	2,566.5	2,799.8	2,736.8	2,841.6	2,847.7	2,862.1	2,874.5
Three-month treasury bill rate (%)	9.58	7.48	5.98	5.19	5.69	5.78	6.00	6.32
Aaa corporate bond yield (Moody's) (%)	12.71	11.37	9.02	8.89	9.32	9.42	9.67	10.18
Housing starts (thou) 2/	1,750	1,742	1,805	1,689	1,586	1,598	1,598	1,669
Auto sales at retail, total (mil)	10.4	11.0	11.4	15.6	10.0	10.5	12.4	11.7
Business inventory/sales ratio	1.48	1.50	1.54	1.49	1.49	1.50	1.48	--
Sales of all retail stores (\$ bil)	107.5	115.0	121.2	129.1	126.3	127.1	129.3 P	128.8
Nondurable goods stores (\$ bil)	68.5	71.8	73.8	74.0	77.3	77.3	78.0 P	77.9
Food stores (\$ bil)	22.6	23.7	24.6	24.8	25.4	25.3	25.5 P	25.4
Eating & drinking places (\$ bil)	10.4	11.1	12.1	12.2	12.8	12.7	12.8 P	12.9
Apparel & accessory stores (\$ bil)	5.6	6.2	6.7	6.8	7.1	7.2	7.1 P	7.2

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary.

Information Contact: James Malley (202) 786-1283.



Table 3.—Foreign Economic Growth, Inflation, &amp; Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986 P	1987 F
Annual percent change										
Total foreign										
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.7	2.6
CPI	10.2	14.0	16.7	15.8	14.4	18.7	21.3	21.0	11.7	22.3
Export earnings	27.5	14.6	22.6	-2.2	-6.8	-2.5	5.6	1.7	12.0	13.3
Developed less U.S.										
Real GNP	4.8	3.1	2.3	1.3	1.1	1.9	3.4	3.3	2.4	2.3
CPI	8.4	9.4	10.9	9.6	8.1	6.1	5.1	4.7	2.9	2.6
Export earnings	23.9	14.9	17.0	-3.3	-4.2	-0.5	6.6	4.9	19.2	13.6
Centrally planned										
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.9
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	7.3	8.1
Latin America										
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	1.8
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.3	179.2	90.9	206.7
Export earnings	28.1	12.8	30.1	4.8	-9.7	-0.1	7.7	-6.0	-15.2	9.3
Africa & Middle East										
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	4.1	0.1	-1.2	0.3
CPI	8.7	16.4	22.1	19.7	12.0	19.0	5.9	5.3	8.2	8.5
Export earnings	49.6	43.2	38.5	-7.0	-18.9	-17.2	-8.4	-10.7	-22.7	10.9
Asia										
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	5.5
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.4	4.9	5.6
Export earnings	30.1	19.4	27.3	5.0	-0.6	3.5	13.3	-1.6	7.1	20.9

P = Preliminary. F = forecast. Information contact: Timothy Baxter (202) 786-1688.

## Farm Prices

Table 4.—Indexes of Prices Received &amp; Paid by Farmers, U.S. Average

	Annual			1987						
	1984	1985	1986	Oct	May	June	July	Aug	Sept R	Oct P
1977=100										
Prices received										
All farm products	142	128	123	121	129	131	128	127	129	127
All crops	139	120	106	97	108	111	106	103	105	106
Food grains	144	133	109	92	105	97	92	94	102	105
Feed grains & hay	145	122	98	76	92	90	86	82	83	85
Feed grains	148	122	96	72	85	87	82	78	78	80
Cotton	108	93	91	78	107	118	118	108	107	106
Tobacco	153	153	138	130	130	130	127	127	136	137
Oil-bearing crops	109	84	77	73	78	80	79	80	79	78
Fruit, all	202	181	167	181	170	199	167	176	183	185
Fresh market 1/	220	192	175	190	178	212	177	188	196	209
Commercial vegetables	135	127	129	133	137	128	134	127	132	127
Fresh market	133	122	123	190	132	120	132	123	196	209
Potatoes & dry beans	157	124	114	113	174	173	162	124	99	98
Livestock & products	146	136	138	145	148	150	149	151	152	148
Meat animals	151	142	145	150	169	173	170	171	171	168
Dairy products	139	131	129	136	124	123	124	127	131	132
Poultry & eggs	135	119	128	137	107	104	105	110	112	99
Prices paid										
Commodities & services										
Interest, taxes, & wage rates	165	163	159	158	--	--	164	--	--	166
Production items	155	151	145	142	--	--	149	--	--	151
Feed	135	116	108	99	--	--	105	--	--	105
Feeder livestock	154	154	153	160	--	--	182	--	--	190
Seed	151	153	148	146	--	--	149	--	--	149
Fertilizer	143	135	124	116	--	--	117	--	--	121
Agricultural chemicals	128	128	127	126	--	--	123	--	--	123
Fuels & energy	201	201	162	150	--	--	170	--	--	172
Farm & motor supplies	147	146	144	143	--	--	145	--	--	144
Autos & trucks	182	193	198	199	--	--	212	--	--	213
Tractors & self-propelled machinery	181	178	174	172	--	--	174	--	--	176
Other machinery	180	183	184	184	--	--	186	--	--	189
Building & fencing	138	136	136	136	--	--	136	--	--	138
Farm services & cash rent	152	150	150	150	--	--	148	--	--	148
Interest Payable per acre on farm real estate debt	257	238	213	213	--	--	207	--	--	207
Taxes Payable per acre on farm real estate	132	133	134	134	--	--	136	--	--	136
Wage rates (seasonally adjusted)	151	154	160	159	--	--	174	--	--	174
Production items, interest, taxes, & wage rates	162	157	151	149	--	--	154	--	--	156
Ratio, prices received to prices paid 2/	86	79	77	77	80	81	78	77	79	77
Prices received (1910-14=100)	650	585	560	555	589	597	583	582	589	582
Prices paid, etc. (Parity index) (1910-14=100)	1,132	1,120	1,097	1,089	--	--	1,128	--	--	1,141
Parity ratio (1910-14=100) 2/	57	52	51	51	--	--	52	--	--	51

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. P = Preliminary. R = Revised.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual <sup>a</sup>			1986	1987					
	1984	1985	1986	Oct	May	June	July	Aug	Sept R	Oct P
<b>Crops</b>										
All wheat (\$/bu)	3.46	3.20	2.71	2.30	2.66	2.45	2.31	2.36	2.54	2.62
Rice, rough (\$/cwt)	8.32	7.85	5.04	3.89	3.74	3.68	3.65	3.74	4.28	4.58
Corn (\$/bu)	3.05	2.49	1.96	1.40	1.66	1.69	1.60	1.47	1.49	1.55
Sorghum (\$/cwt)	4.60	3.97	3.11	2.34	2.69	2.80	2.68	2.52	2.43	2.49
All hay, baled (\$/ton)	75.38	69.93	61.80	56.90	73.30	63.20	61.60	61.80	65.10	65.10
Soybeans (\$/bu)	7.02	5.42	5.00	4.55	5.20	5.36	5.25	5.02	4.99	5.00
Cotton, Upland (cts/lb)	65.6	56.1	54.7	50.0	64.8	71.5	71.7	65.3	64.9	63.9
Potatoes (\$/cwt)	5.69	3.92	4.94	4.20	7.45	7.43	6.89	5.10	3.91	3.85
Lettuce (\$/cwt)	11.00	10.90	11.90	8.33	8.54	8.71	16.90	18.00	16.30	13.90
Tomatoes (\$/cwt)	25.60	24.10	25.10	30.30	28.30	26.00	20.80	16.50	21.20	23.00
Onions (\$/cwt)	11.70	9.97	9.80	12.00	23.10	17.00	14.30	9.79	10.30	9.56
Dry edible beans (\$/cwt)	18.70	17.60	19.00	20.60	18.00	17.60	17.60	16.10	15.40	15.30
Apples for fresh use (cts/lb)	15.5	17.3	NA	20.1	21.4	25.7	25.3	15.5	18.0	14.3
Pears for fresh use (\$/ton)	300.00	349.00	393.00	403.00	338.00	630.00	295.00	234.00	239.00	196.00
Oranges, all uses (\$/box) 1/	5.95	7.41	4.18	5.81	5.26	6.22	4.58	6.18	6.01	7.36
Grapefruit, all uses (\$/box) 1/	2.68	4.01	4.21	6.53	4.41	5.08	4.50	5.95	5.52	5.07
<b>Livestock</b>										
Beef cattle (\$/cwt)	57.56	53.96	52.84	54.40	63.00	62.50	61.10	61.90	63.70	63.50
Calves (\$/cwt)	60.23	62.40	60.89	62.70	77.30	78.80	80.30	82.30	85.90	84.30
Hogs (\$/cwt)	47.61	43.88	50.10	53.10	54.40	60.30	59.60	58.60	54.30	50.20
Lambs (\$/cwt)	60.33	68.07	69.10	62.50	90.10	83.50	78.70	76.10	76.80	74.90
All milk, sold to plants (\$/cwt)	13.46	12.75	12.50	13.20	12.00	11.90	12.00	12.30	12.70	12.80
Milk, manuf. grade (\$/cwt)	12.49	11.72	11.46	12.20	11.00	10.90	10.90	11.20	11.60	11.60
Broilers (cts/lb)	33.7	30.1	34.5	39.3	30.0	27.6	28.1	31.6	28.5	25.2
Eggs (cts/doz) 2/	70.3	57.4	60.3	58.3	50.1	50.9	51.4	50.6	59.7	51.3
Turkeys (cts/lb)	46.6	47.2	44.4	53.0	35.0	34.5	33.1	31.4	30.8	29.9
Wool (cts/lb) 3/	79.5	63.3	66.8	69.7	111.0	94.9	86.6	84.2	88.2	87.2

1/ Equivalent on-tree returns. 2/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 3/ Average local market price, excluding incentive payments. \*Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. P = Preliminary. R = revised. NA = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

## Producer and Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers,<sup>a</sup> U.S. Average (Not Seasonally Adjusted)

	Annual	1986	1987 1/							
	1986	Sept	Feb	Mar	Apr	May	June	July	Aug	Sept
						1967=100				
Consumer price index, all items	328.4	330.2	334.4	335.9	337.7	338.7	340.1	340.8	342.7	344.4
Consumer price index, less food	328.6	330.0	333.6	335.4	337.3	338.3	339.6	340.5	342.7	344.6
All food	319.7	323.2	330.1	330.0	331.0	332.5	334.1	333.6	333.8	334.9
Food away from home	360.1	363.3	369.6	370.9	371.5	372.3	373.8	374.9	375.9	377.4
Food at home	305.3	309.0	316.6	315.8	316.9	318.8	320.4	319.1	319.0	319.8
Meats 2/	273.9	283.6	285.3	286.4	286.9	291.8	297.1	299.8	301.0	300.7
Beef & veal	271.4	272.4	280.7	282.7	285.8	292.6	297.6	297.7	296.2	295.1
Pork	273.8	300.1	289.8	287.2	284.4	289.4	297.7	305.8	308.3	309.4
Poultry	232.7	249.5	237.0	234.1	231.1	230.5	228.3	226.1	230.0	229.1
Fish	443.2	447.2	479.9	487.4	488.7	486.6	484.2	489.7	493.7	498.3
Eggs	186.3	186.0	187.4	180.0	174.6	169.5	161.2	168.2	164.4	187.0
Dairy products 3/	258.4	258.5	264.7	263.7	263.2	264.3	263.7	263.2	264.2	266.0
Fats & oils 4/	287.8	285.6	290.3	294.6	291.8	293.3	291.4	292.9	292.6	291.2
Fresh fruit	369.3	384.1	406.7	403.9	417.8	431.8	437.5	416.7	410.2	409.8
Processed fruit 5/	163.3	161.9	166.3	167.5	168.4	170.5	171.0	170.2	171.8	172.3
Fresh vegetables	330.3	321.0	377.7	364.7	379.4	379.0	396.3	371.0	351.3	351.5
Potatoes	307.3	335.4	357.0	355.3	371.4	406.1	436.1	444.6	407.7	353.3
Processed vegetables 5/	147.4	146.9	148.5	152.1	150.6	151.2	151.9	152.3	152.7	152.3
Cereals & bakery products 5/	325.8	328.5	332.7	333.2	335.6	336.5	337.0	338.4	338.8	338.9
Sugar & sweets	411.1	413.7	415.8	417.2	417.4	417.7	419.3	418.8	419.6	420.6
Beverages, nonalcoholic	478.2	475.7	481.9	475.4	469.8	467.9	462.6	458.5	458.8	458.4
Apparel commodities less footwear	188.8	194.0	189.0	196.1	199.8	198.5	194.7	190.7	195.3	203.7
Footwear	211.2	212.0	211.0	216.5	219.2	220.8	218.8	214.3	215.9	219.1
Tobacco & smoking products	351.0	356.8	368.3	369.6	370.4	370.9	372.7	379.9	380.8	382.4
Beverages, alcoholic	239.7	240.4	243.2	243.6	244.3	245.0	245.9	246.7	247.3	247.8

1/ Beginning January 1987 the CPI is calculated using 1982-84 expenditure patterns and updated population weights. The old series were based on 1972-73 expenditure patterns. 2/ Beef, veal, lamb, pork, and processed meat. 3/ Includes butter. 4/ Excludes butter. 5/ December 1977=100.

Information contact: Ralph Parlett (202) 786-1870.



Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1986	1987					
	1984	1985	1986	Sept	Apr	May R	June	July	Aug	Sept
	1967=100									
Finished goods 1/	291.1	293.7	289.7	287.3	284.9	295.8	296.8	297.8	297.2	296.7
Consumer foods	273.3	271.2	278.1	282.9	283.2	286.6	287.7	287.6	283.6	286.0
Fresh fruit	253.0	256.1	262.1	273.9	252.5	256.7	260.3	256.1	247.8	248.9
Fresh & dried vegetables	278.3	245.1	241.1	243.6	258.5	252.2	284.9	282.2	232.4	245.0
Dried fruit	386.6	363.5	377.4	377.9	385.3	385.3	383.6	390.6	390.5	390.0
Canned fruit & juice	312.4	323.1	315.1	311.8	321.0	325.3	331.1	330.2	328.0	329.8
Frozen fruit & juice	351.0	362.3	314.8	310.8	341.0	344.7	343.1	343.2	340.7	344.6
Fresh veg. excl. potatoes	219.1	205.9	204.0	202.4	209.8	193.8	214.0	209.2	158.2	201.6
Canned veg. and juices	252.6	246.9	245.1	248.2	253.3	250.4	257.5	247.5	249.1	252.5
Frozen vegetables	291.0	298.4	298.5	298.4	301.7	301.0	296.9	300.4	300.1	300.7
Potatoes	397.7	304.3	312.6	330.8	366.1	413.1	397.4	398.8	367.2	332.2
Eggs	210.8	171.0	177.9	181.1	161.0	150.9	143.2	152.4	142.4	179.9
Bakery products	299.1	313.7	321.3	323.1	322.4	323.2	324.8	326.4	327.6	328.5
Meats	236.8	227.9	235.2	251.9	250.5	265.3	269.1	269.3	257.4	263.7
Beef & veal	237.1	221.3	216.0	219.8	239.6	251.2	248.7	246.2	233.5	236.5
Pork	226.5	223.8	250.9	291.5	253.5	280.0	295.5	298.1	281.5	298.1
Processed poultry	206.0	197.3	207.8	223.0	190.5	191.7	183.3	181.4	185.6	180.4
Fish	476.0	484.2	530.4	527.5	569.5	597.3	602.9	599.7	578.3	584.0
Dairy products	251.7	249.4	248.8	250.3	252.0	251.1	251.0	252.4	253.8	255.8
Processed fruits & vegetables	294.3	296.3	287.9	288.4	297.3	297.4	300.1	297.0	296.8	299.0
Shortening & cooking oils	311.6	290.6	242.4	231.6	239.5	243.3	242.7	243.7	240.9	244.2
Consumer finished goods less foods	294.1	297.3	283.5	277.4	288.6	288.6	290.1	292.0	292.9	291.1
Beverages, alcoholic	209.8	213.0	217.8	218.1	220.5	219.5	220.2	217.7	219.1	216.6
Soft drinks	340.2	343.6	349.7	348.9	356.6	358.0	356.5	355.3	357.1	356.2
Apparel	201.3	204.1	206.5	206.8	209.5	209.4	210.1	211.0	211.6	212.5
Footwear	251.7	256.7	261.8	262.1	265.1	266.7	263.4	268.5	270.3	271.9
Tobacco products	398.4	428.1	460.4	469.2	487.4	487.4	487.5	509.3	509.2	509.1
Intermediate materials 2/	320.0	318.7	307.6	306.1	311.0	313.1	314.8	317.1	318.2	318.9
Materials for food manufacturing	271.1	258.8	251.0	254.3	255.3	261.9	261.2	262.0	258.5	261.9
Flour	185.2	183.0	173.4	162.3	170.4	177.1	168.9	167.2	166.9	171.1
Refined sugar 3/	173.5	165.6	166.4	167.5	171.5	171.2	171.9	172.7	172.1	172.6
Crude vegetable oils	262.2	219.6	135.8	121.6	128.6	144.9	134.1	131.5	126.9	127.7
Crude materials 4/	330.8	306.1	280.3	275.4	295.3	302.9	304.9	307.8	307.7	305.4
Foodstuffs & feedstuffs	259.5	235.0	231.0	233.5	240.1	251.7	246.5	243.1	240.1	238.8
Fruits & vegetables 5/	278.1	260.5	261.2	268.1	258.5	265.1	285.5	282.0	249.5	257.3
Grains	239.7	202.8	167.2	132.6	149.8	166.6	156.0	145.0	133.6	146.5
Livestock	251.8	229.9	236.1	253.1	269.0	282.5	280.9	274.4	273.1	266.6
Poultry, live	240.6	226.2	248.8	279.5	202.0	216.4	180.7	196.3	213.4	192.5
Fibers, plant & animal	228.4	197.8	179.3	107.9	199.6	220.6	235.7	243.7	250.5	240.5
Fluid milk	278.3	264.6	256.9	258.6	256.1	252.5	249.0	253.5	257.3	261.8
Oilseeds	253.3	202.7	196.2	187.2	206.8	223.5	226.6	221.0	213.0	207.4
Tobacco, leaf	274.6	274.1	243.0	239.6	229.1	229.1	229.1	229.1	223.8	239.6
Sugar, raw cane	312.0	291.3	292.2	293.2	307.0	308.1	309.0	310.8	309.5	308.9
All commodities	310.3	308.7	299.8	297.5	305.0	307.1	308.5	310.2	310.5	310.4
Industrial commodities	322.6	323.8	312.1	308.7	317.3	318.3	320.2	322.6	323.8	323.3
All foods 6/	269.2	264.5	268.4	273.2	273.2	277.4	278.5	278.5	273.8	276.8
Farm products &										
Processed foods & feeds	262.4	250.5	252.0	254.0	257.1	263.7	263.0	261.8	258.6	260.0
Farm products	255.8	230.5	224.7	224.1	231.9	242.0	239.1	236.3	231.1	232.1
Processed foods & feeds 6/	265.0	260.4	265.1	269.0	269.5	274.3	274.8	274.4	272.1	273.7
Cereal & bakery products	270.5	279.9	281.8	280.5	282.7	284.3	283.4	283.7	284.7	287.0
Sugar & confectionery	301.2	291.0	295.7	297.6	301.7	304.2	304.5	307.4	307.3	306.6
Beverages	273.1	276.6	294.3	292.1	291.1	290.8	290.4	288.1	289.2	285.8

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977=100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977=100). R = revised.

Information contact: Bureau of Labor Statistics (202) 523-1913.

# Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual				1986		1987					
	1983	1984	1985	1986	Sept	Apr	May	June	July	Aug	Sept	
<b>Market basket 1/</b>												
Retail cost (1967=100)	268.7	279.3	282.6	288.7	293.1	299.8	302.7	305.7	305.2	305.0	305.8	
Farm value (1967=100)	242.3	295.4	237.2	234.1	245.9	240.1	246.8	249.4	247.4	243.2	242.3	
Farm-retail spread (1967=100)	284.3	293.3	308.3	320.8	320.8	334.9	335.5	338.8	338.1	341.4	343.1	
Farm value/retail cost (%)	33.4	33.9	31.1	30.0	31.1	29.7	30.2	30.2	30.0	29.5	29.3	
<b>Meat Products</b>												
Retail cost (1967=100)	267.2	268.1	265.5	273.9	300.7	285.5	291.5	297.7	299.8	301.0	300.7	
Farm value (1967=100)	235.8	241.5	221.8	229.1	254.8	245.2	260.5	270.1	268.6	257.6	254.8	
Farm-retail spread (1967=100)	304.0	299.1	316.6	326.2	354.4	332.6	327.8	330.1	336.3	351.8	354.4	
Farm value/retail cost (%)	47.6	48.6	45.1	45.1	45.7	46.3	48.2	48.9	48.3	46.2	45.7	
<b>Dairy Products</b>												
Retail cost (1967=100)	250.0	253.2	258.0	258.4	258.5	263.0	263.7	263.2	263.2	264.2	266.0	
Farm value (1967=100)	262.1	258.8	248.2	241.5	243.9	241.8	238.0	237.1	238.8	244.1	244.1	
Farm-retail spread (1967=100)	239.3	248.3	266.5	273.3	271.4	281.6	286.3	286.1	284.6	281.9	285.2	
Farm value/retail cost (%)	49.0	47.8	45.0	43.7	44.1	43.0	42.2	42.1	42.4	43.2	42.9	
<b>Poultry</b>												
Retail cost (1967=100)	197.5	218.5	216.4	232.7	249.5	230.7	230.4	228.6	226.1	230.0	229.1	
Farm value (1967=100)	213.0	249.9	234.9	255.4	282.2	215.8	216.0	201.9	202.6	219.8	201.7	
Farm-retail spread (1967=100)	182.4	188.1	198.4	210.9	217.8	245.2	244.3	230.4	248.8	238.9	255.7	
Farm value/retail cost (%)	53.1	56.3	53.4	54.0	55.6	46.0	46.1	43.4	44.1	47.0	43.3	
<b>Eggs</b>												
Retail cost (1967=100)	187.1	209.0	174.3	186.3	186.0	175.0	169.9	161.5	168.2	164.4	187.0	
Farm value (1967=100)	206.1	230.3	178.9	192.7	198.3	166.7	143.7	147.5	149.9	146.5	183.7	
Farm-retail spread (1967=100)	159.5	178.2	167.6	177.1	168.3	187.0	207.8	181.7	194.6	190.3	191.8	
Farm value/retail cost (%)	65.1	65.1	60.7	61.1	63.0	56.3	50.0	54.0	52.7	52.6	58.1	
<b>Cereal &amp; bakery products</b>												
Retail cost (1967=100)	292.5	305.3	317.0	325.8	328.5	335.0	335.6	336.3	338.4	338.8	338.9	
Farm value (1967=100)	186.6	192.0	175.8	142.3	121.7	131.0	133.8	128.0	123.3	124.0	127.8	
Farm-retail spread (1967=100)	314.0	328.7	346.2	363.7	371.3	377.2	377.4	379.4	382.9	383.3	382.6	
Farm value/retail cost (%)	11.1	10.8	9.5	7.5	6.4	6.7	6.8	6.5	6.2	6.3	6.5	
<b>Fresh fruits</b>												
Retail cost (1967=100)	303.6	345.3	383.5	390.1	407.7	442.1	464.4	476.2	459.9	452.0	451.2	
Farm value (1967=100)	220.6	315.1	302.7	285.3	281.4	257.3	297.8	312.1	289.5	242.4	273.0	
Farm-retail spread (1967=100)	340.8	358.9	419.8	437.1	459.9	529.1	539.2	549.9	536.4	546.1	531.2	
Farm value/retail cost (%)	22.5	28.3	24.4	22.7	22.1	18.0	19.9	20.3	19.5	16.6	18.8	
<b>Fresh vegetables</b>												
Retail cost (1967=100)	299.3	331.8	317.5	330.3	321.0	378.0	376.0	395.4	371.0	351.3	351.5	
Farm value (1967=100)	267.4	298.7	256.7	248.1	267.0	301.5	293.4	314.7	318.0	317.6	291.3	
Farm-retail spread (1967=100)	314.3	347.4	346.1	369.0	346.4	414.0	414.6	433.3	395.9	367.1	379.8	
Farm value/retail cost (%)	28.6	28.8	25.9	24.0	26.6	25.5	25.0	25.4	27.4	28.9	26.5	
<b>Processed fruits &amp; vegetables</b>												
Retail cost (1967=100)	288.8	306.1	314.1	309.1	307.3	317.0	319.0	320.2	321.0	323.0	323.2	
Farm value (1967=100)	300.5	343.5	378.5	326.3	315.3	365.6	364.7	358.4	338.1	335.9	338.2	
Farm-retail spread (1967=100)	286.2	297.8	299.9	305.3	305.5	306.5	308.9	313.3	317.2	320.1	319.9	
Farm value/retail cost (%)	18.8	20.3	21.8	18.1	18.6	20.8	20.7	19.8	19.1	18.8	19.0	
<b>Fats &amp; oils</b>												
Retail cost (1967=100)	263.1	288.0	294.4	287.8	285.6	291.4	292.8	291.8	292.9	292.6	291.2	
Farm value (1967=100)	251.0	324.8	271.3	199.1	178.7	188.1	198.3	186.5	189.7	189.7	186.3	
Farm-retail spread (1967=100)	267.8	273.8	303.3	321.9	326.7	331.3	329.1	331.6	332.6	332.2	331.5	
Farm value/retail cost (%)	26.5	31.3	25.6	19.4	17.4	17.9	18.8	17.9	18.0	18.0	17.8	

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproducts. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (cwt) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 749, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1830.



Table 9.—Price Indexes of Food Marketing Costs

	Annual			1986			1987		
	1984	1985	1986	II	III	IV	I	II	III P
	1967=100								
Labor-hourly earnings and benefits	365.5	363.0	359.8	361.3	356.0	359.1	366.5	366.7	366.4
Processing	350.2	357.9	365.8	369.6	362.3	366.8	375.3	376.4	373.9
Wholesaling	371.1	382.7	373.0	370.7	371.5	376.6	392.1	391.6	393.5
Retailing	378.3	364.1	348.0	349.0	342.7	343.7	346.5	346.0	347.0
Packaging & containers	307.6	312.1	317.4	316.3	318.3	320.6	325.0	328.1	330.9
Paperboard boxes & containers	281.1	271.6	269.1	266.4	270.1	273.7	281.5	285.5	288.9
Metal cans	397.3	416.9	430.1	430.2	430.2	430.2	431.3	433.5	433.5
Paper bags & related products	280.9	294.7	307.8	307.2	308.8	316.7	322.4	328.8	333.7
Plastic films & bottles	272.1	274.4	274.8	274.8	275.1	274.7	277.2	278.1	280.9
Glass containers	360.8	380.0	398.0	398.1	401.9	400.5	402.5	402.7	401.9
Metal foil	226.9	213.8	208.3	208.9	209.1	210.3	210.2	213.1	226.3
Transportation services	390.9	393.9	391.7	393.9	392.2	386.4	384.1	385.3	385.4
Advertising	300.5	320.2	339.7	338.4	341.6	345.6	354.9	358.9	363.3
Fuel & power	712.5	700.0	590.2	586.0	569.8	562.5	581.7	588.1	611.8
Electric	440.0	453.5	457.9	457.5	466.8	448.7	440.9	446.6	465.7
Petroleum	880.4	821.5	499.8	477.9	414.8	446.2	520.5	541.3	582.4
Natural gas	1,162.9	1,158.2	1,096.9	1,111.8	1,106.1	1,062.1	1,061.2	1,057.3	1,043.9
Communications, water & sewage	215.5	224.9	236.1	235.9	238.8	238.3	236.9	237.7	239.7
Rent	261.6	268.3	273.8	275.3	275.3	275.9	276.2	279.2	279.5
Maintenance & repair	350.3	360.3	368.5	364.2	369.1	373.5	377.5	379.7	385.1
Business services	306.1	321.9	334.1	333.3	335.8	338.5	341.8	345.3	348.3
Supplies	288.5	287.9	282.8	282.3	280.6	281.0	283.6	286.2	287.0
Property taxes & insurance	343.7	362.0	382.3	380.7	384.2	389.0	392.6	397.3	400.9
Interest, short-term	198.8	157.2	125.1	128.0	115.3	112.1	116.4	134.0	137.5
Total marketing cost index	357.0	358.6	355.0	355.3	352.7	354.3	359.9	361.9	363.9

\* Indexes measure changes in employee earnings and benefits and in prices of supplies and services used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Note: Annual historical data on food marketing cost indexes may be found in Food Consumption, Prices, and Expenditures, Statistical Bulletin 713, ERS, USDA.

Information contact: Denis Dunham (202) 786-1870.

# Livestock and Products

Table 10.—U.S. Meat Supply & Use

Item	Beg. stocks	Production 1/	Imports	Total supply	Exports	Shipments	Military consumption	Ending stocks	Civilian consumption		Primary market price 3/
									Total	Per capita 2/	
Million pounds 4/											
Beef:											
1985	358	23,728	2,071	26,157	328	51	115	317	25,346	79.1	58.37
1986	317	24,371	2,129	26,817	521	52	110	311	25,823	79.8	57.75
1987 F	311	23,488	2,250	26,049	630	57	104	300	24,958	76.4	64-65
1988 F	300	22,650	2,275	25,083	500	60	110	325	24,088	73.1	62-68
Pork:											
1985	274	14,807	1,128	16,209	128	131	70	229	15,651	62.1	44.77
1986	229	14,063	1,122	15,414	86	132	74	197	14,926	58.6	51.19
1987 F	197	14,214	1,200	15,611	100	128	75	220	15,087	58.7	52-53
1988 F	220	15,715	1,225	17,160	120	140	80	275	16,545	63.7	37-43
Veal:											
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986	11	524	27	562	5	1	8	7	544	1.9	60.89
1987 F	7	440	20	467	6	1	7	7	446	1.5	78-79
1988 F	7	415	25	447	5	1	7	7	427	1.5	75-81
Lamb and mutton:											
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986	13	338	41	392	2	2	0	12	376	1.4	69.46
1987 F	12	315	45	372	1	2	0	8	361	1.3	78-79
1988 F	8	337	50	395	2	1	0	8	383	1.4	70-76
Total red meat:											
1985	653	39,408	3,255	43,316	461	185	192	570	41,908	144.5	NA
1986	570	39,296	3,319	43,185	613	187	190	527	41,670	141.7	NA
1987 F	527	38,457	3,515	42,499	737	189	186	535	40,852	138.0	NA
1988 F	535	38,975	3,575	43,085	627	202	197	616	41,443	140.0	NA
Broilers:											
1985	20	13,752	0	13,781	417	143	34	27	13,161	55.5	50.8
1986	27	14,316	0	14,342	566	149	35	24	13,568	56.7	56.9
1987 F	24	15,504	0	15,528	776	141	33	25	14,552	60.2	47-48
1988 F	25	16,282	0	16,307	650	140	36	25	15,456	63.4	40-46
Mature chicken:											
1985	119	636	0	755	21	1	2	144	587	2.5	NA
1986	144	629	0	773	16	3	2	163	589	2.5	NA
1987 F	163	651	0	814	20	3	2	130	658	2.7	NA
1988 F	130	652	0	782	20	4	1	135	622	2.6	NA
Turkeys:											
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986	150	3,271	0	3,422	27	4	10	178	3,202	13.4	72.2
1987 F	178	3,827	0	4,005	30	2	15	300	3,657	15.1	54-55
1988 F	300	4,072	0	4,372	30	4	16	200	4,122	16.8	51-57
Total poultry:											
1985	264	17,340	0	17,604	465	151	49	321	16,619	70.1	NA
1986	321	18,216	0	18,537	608	156	47	365	17,359	72.5	NA
1987 F	365	19,982	0	20,347	827	147	51	455	18,868	78.1	NA
1988 F	455	21,007	0	21,462	700	148	53	360	20,201	82.8	NA
Red meat & poultry:											
1985	917	56,748	3,255	60,920	926	336	241	891	58,526	214.6	NA
1986	891	57,512	3,319	61,722	1,223	343	235	892	59,029	214.3	NA
1987 F	892	58,439	3,515	62,845	1,564	325	237	890	59,719	216.0	NA
1988 F	990	59,982	3,575	64,547	1,327	350	250	976	61,644	222.5	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 900-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. NA = not available. F = forecast.

Information contact: Ron Gustafson, Leland Southard, or Mark Welmer (202) 786-1830.



Table 11.—U.S. Egg Supply &amp; Use

	Beg. stocks	Pro- duc- tion	Im- ports	Total supply	Ex- ports	Ship- ments	Milli- tary use	Hatch- ing use	Ending stocks	Civilian consumption		Wholesale price*
										Total	Per capita	
Million dozen												
1983	20.3	5,659.2	23.4	5,703.0	85.8	26.6	25.1	500.0	9.3	5,056.2	260.8	75.2
1984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9
1985	11.1	5,688.4	12.7	5,712.2	70.6	30.3	20.2	548.1	10.7	5,032.2	254.7	66.4
1986	10.7	5,714.9	13.7	5,739.3	101.6	28.0	17.5	565.9	10.4	5,016.1	251.5	71.1
1987 F	10.4	5,799.2	6.8	5,816.4	108.3	23.1	18.6	593.9	10.0	5,062.5	251.3	62-63
1988 F	10.0	5,760.0	8.0	5,778.0	105.0	24.0	20.0	625.0	10.0	4,994.0	245.7	60-66

\* Cartoned Grade A large eggs in New York. F = forecast. Information contact: Mark Weimar (202) 786-1830.

Table 12.—U.S. Milk Supply & Use<sup>1</sup>

Calendar year	Pro- duc- tion	Farm use	Commercial		Im- ports	Total Commer- cial supply	CCC net re- movals	Commercial		All milk Price 2/ \$
			Farm market- ings	Beg. stocks				Ending stocks	Disap- pear- ance	
			Billion pounds							
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986 P	144.1	2.6	141.5	4.6	2.7	149.1	10.6	4.2	134.0	12.51
1987 F	142.5	2.6	139.9	4.2	2.7	146.8	5.8	4.3	136.7	12.55

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. P = preliminary. F = forecast. Information contact: Jim Miller (202) 786-1830.

Table 13.—Poultry &amp; Eggs

	Annual			1986	1987					
	1984	1985	1986	Sept	Apr	May	June	July	Aug	Sept
Broilers										
Federally inspected slaughter, certified (mil lb)	12,998.6	13,569.2	14,265.6	1,241.6	1,277.1	1,261.0	1,371.5	1,337.9	1,257.0	1,370.7
Wholesale price, 12-city, (cts/lb)	55.6	50.8	56.9	61.0	48.6	50.5	45.3	46.9	52.7	47.33
Price of grower feed (\$/ton)	233	197	NA	192	185	182	184	194	192	190
Broiler-feed price ratio 1/	2.8	3.1	NA	3.8	3.2	3.3	3.0	2.9	3.3	3.0
Stocks beginning of period (mil lb)	21.2	19.7	26.6	24.3	25.1	26.9	26.9	24.2	24.8	24.7
Broiler-type chicks hatched (mil) 2/	4,593.9	4,803.8	5,013.3	401.7	454.3	471.2	458.3	458.9	449.9	430.7
Turkeys										
Federally inspected slaughter, certified (mil lb)	2,574	2,800	3,133	331.4	256.8	274.2	335.8	358.8	356.9	383.3
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts/lb)	74.4	75.5	72.2	81.2	58.3	55.3	55.7	56.3	56.0	56.1
Price of turkey grower feed (\$/ton)	245	212	NA	219	209	212	208	214	217	220
Turkey-feed price ratio 1/	3.8	4.4	NA	4.7	3.5	3.3	3.3	3.1	2.9	2.8
Stocks beginning of period (mil lb)	161.8	125.3	150.2	449.3	226.6	250.9	301.4	381.1	472.5	559.6
Poults placed in U.S. (mil)	190.0	197.8	225.4	13.6	26.1	26.6	27.0	26.0	20.0	15.7
Eggs										
Farm production (mil)	68,498	68,261	68,579	5,548	5,800	5,830	5,620	5,790	5,790	5,690
Average number of layers (mil) 3/	278	277	278	229	233	231	229	229	231	233
Rate of lay (eggs per layer on farms) 3/	245	247	247	20.3	20.8	21.1	20.3	20.8	20.8	20.2
Cartoned Price, New York, grade A large (cts/doz) 4/	80.9	66.4	71.1	72.6	62.4	55.6	58.7	59.1	63.2	68.3
Price of laying feed (\$/ton)	206	182	NA	172	166	167	167	177	178	178
Egg-feed price ratio 1/	6.8	6.3	NA	7.3	6.7	6.0	6.1	5.8	5.7	6.7
Stocks, first of month										
Shell (mil doz)	.39	.93	.72	.99	.96	.84	1.14	.96	1.02	.96
Frozen (mil doz)	8.9	10.2	10.0	11.4	11.0	11.3	13.2	12.9	13.1	13.3
Replacement chicks hatched (mil)	459	407	425	32.6	42.1	41.4	38.0	33.5	35.3	32.5

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly date only available for 20 states. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. NA = not available.

Information contact: Mark Weimar (202) 786-1830.

Table 14.—Dairy

	Annual			1986	1987					
	1984	1985	1986	Sept	Apr	May	June	July	Aug	Sept
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.29	11.48	11.30	11.55	11.00	11.00	11.07	11.17	11.27	11.42
Wholesale prices										
Butter, Grade A Chl. (cts/lb)	148.8	141.1	144.5	154.2	138.8	138.4	144.6	149.0	148.1	145.3
Am. cheese, Wis. assembly pt. (cts/lb)	138.0	127.7	127.3	129.7	122.4	122.0	122.0	123.2	125.5	126.6
Nonfat dry milk, (cts/lb) 2/	80.9	84.0	80.6	80.6	79.0	79.1	79.2	79.2	79.6	80.4
USDA net removals										
Total milk equiv. (mil lb) 3/	8,637.0	13,174.1	10,628.1	172.2	598.8	519.4	384.5	157.8	148.9	NA
Butter (mil lb)	202.3	334.2	287.6	-.5	13.6	14.0	4.0	-.2	1.0	NA
Am. cheese (mil lb)	447.3	629.0	468.4	17.9	32.0	23.2	30.1	15.7	12.2	NA
Nonfat dry milk (mil lb)	678.4	940.6	827.3	41.0	61.0	58.8	67.2	53.2	39.6	NA
Milk										
Milk prod. 21 states (mil lb)	114,545	121,043	122,185	9,662	10,378	10,957	10,491	10,433	10,270	9,887
Milk per cow (lb)	12,691	13,160	13,445	1,080	1,182	1,249	1,196	1,188	1,171	1,127
Number of milk cows (thou)	9,026	9,198	9,088	8,950	8,780	8,772	8,771	8,785	8,772	8,775
U.S. milk production (mil lb)	135,450	143,147	144,080	6/11,361	6/12,218	6/12,641	6/12,282	6/12,226	6/12,015	6/11,590
Stock, beginning										
Total (mil lb)	22,646	16,704	13,695	17,169	13,319	13,101	13,310	12,724	11,770	10,580
Commercial (mil lb)	5,234	4,937	4,590	5,348	4,446	4,813	5,161	5,661	5,696	5,328
Government (mil lb)	17,412	11,767	9,105	11,822	8,873	8,288	8,148	7,063	6,074	5,252
Imports, total (mil lb) 3/	2,741	2,777	2,733	214	167	145	160	244	227	NA
Commercial disappearance milk equiv. (mil lb)	126,912	130,640	134,049	11,426	11,209	11,902	11,347	12,060	12,244	NA
Butter										
Production (mil lb)	1,103.3	1,247.8	1,202.4	80.2	104.2	101.7	83.1	76.2	67.6	78.1
Stocks, beginning (mil lb)	499.4	296.5	205.5	304.4	254.0	247.9	250.2	237.9	211.2	187.3
Commercial disappearance (mil lb)	902.7	918.2	922.9	81.8	86.3	79.3	63.2	79.2	78.3	NA
American cheese										
Production (mil lb)	2,648.5	2,855.2	2,798.2	198.2	246.0	264.3	246.1	240.6	208.5	206.5
Stocks, beginning (mil lb)	1,161.5	960.5	850.2	927.5	614.8	603.5	624.4	603.0	577.8	533.3
Commercial disappearance (mil lb)	2,253.6	2,279.1	2,382.8	201.7	190.1	228.8	202.0	220.4	214.8	NA
Other cheese										
Production (mil lb)	2,025.5	2,225.7	2,411.0	211.9	212.4	220.4	217.7	217.6	215.0	220.5
Stocks, beginning (mil lb)	104.9	101.4	94.1	100.2	89.4	91.8	97.1	94.4	95.2	96.7
Commercial disappearance (mil lb)	2,310.9	2,515.7	2,684.9	236.8	225.4	231.2	238.1	242.3	235.2	NA
Nonfat dry milk										
Production (mil lb)	1,160.7	1,390.0	1,284.1	74.3	101.4	118.6	104.8	98.6	80.0	65.7
Stocks, beginning (mil lb)	1,405.2	1,247.6	1,011.1	934.4	512.9	460.8	485.5	428.7	334.7	301.8
Commercial disappearance (mil lb)	497.8	435.0	479.1	46.4	35.8	38.3	41.3	57.9	46.5	NA
Frozen dessert										
Production (mil gal) 4/	1,241.8	1,251.0	1,248.6	104.6	113.0	118.8	134.6	135.9	123.3	108.5

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process. 3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. NA = not available.

Information contact: Jim Miller (202) 786-1830.

Table 15.—Wool

	Annual			1986	1987					
	1984	1985	1986	Sept	Apr	May	June	July	Aug	Sept
U.S. wool price, Boston 1/ (cts/lb)	229	192	191	190	260	270	270	270	300	295
Imported wool price, Boston 2/ (cts/lb)	241	197	201	184	248	250	250	243	261	244
U.S. mill consumption, scoured apparel wool (thou lb)	128,982	106,051	126,768	9,405	11,608	11,328	13,558	9,661	10,030	12,438
Carpet wool (thou lb)	13,088	10,562	9,960	929	1,209	1,190	934	1,162	1,412	1,162

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Information contact: John Lawler (202) 786-1840.



Table 16.—Meat Animals

	Annual			1986	1987					
	1984	1985	1986	Sept	Apr	May	June	July	Aug	Sept
<b>Cattle on feed (7-States)</b>										
Number on feed (thou head) 1/	8,006	8,635	7,920	6,404	7,222	7,233	7,520	7,193	6,689	6,818
Placed on feed (thou head)	20,772	19,346	20,005	2,103	1,726	1,954	1,462	1,264	1,897	2,424
Marketings (thou head)	18,785	18,989	19,243	1,637	1,581	1,524	1,702	1,694	1,700	1,636
Other disappearance (thou head)	1,376	1,132	1,048	59	134	143	87	74	68	71
Beef steer-corn price ratio.										
Omaha 2/	21.6	23.3	31.0	42.4	42.3	40.1	38.8	41.0	44.0	42.8
Hog-corn price ratio, Omaha 2/	16.1	17.8	27.8	42.9	32.7	31.6	34.3	38.4	41.3	36.3
Market prices (\$ per cwt)										
Slaughter cattle:										
Choice steers, Omaha	65.34	58.37	57.75	59.43	66.30	70.66	68.83	65.80	64.50	64.81
Utility cows, Omaha	39.81	38.32	37.19	38.42	44.23	44.36	44.72	45.64	46.35	47.62
Choice vealers, S. St. Paul	63.95	58.28	59.92	67.50	75.00	90.00	90.63	77.50	79.22	80.25
Feeder cattle:										
Choice, Kansas City, 600-700 lb.	65.28	64.56	62.79	65.50	72.90	73.38	74.00	76.20	79.38	81.50
Slaughter hogs:										
Barrows & gilts, 7-markets	48.86	44.77	51.19	59.01	51.85	55.58	61.08	61.85	60.35	54.72
Feeder pigs:										
S. Mo. 40-50 lb. (per head)	39.12	37.20	45.62	59.63	56.00	51.66	45.89	45.60	48.05	47.28
Slaughter sheep & lambs:										
Lambs, Choice, San Angelo	62.18	68.61	69.46	66.38	93.12	94.50	84.63	76.83	71.83	70.05
Ewes, Good, San Angelo	20.90	34.02	34.78	36.81	39.05	36.25	34.62	36.62	38.67	39.81
Feeder lambs:										
Choice, San Angelo	61.02	85.91	73.14	83.88	109.40	112.62	94.56	98.75	96.75	102.55
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb	98.01	90.76	88.98	90.52	100.56	107.80	105.71	99.29	95.45	96.87
Canner & Cutter cow beef	74.70	74.13	71.31	72.60	82.19	82.05	84.15	84.51	85.63	86.82
Pork loins, 8-14 lb. 3/	96.36	91.51	104.78	118.84	102.21	120.77	124.38	121.73	123.50	122.66
Pork bellies, 12-14 lb.	60.08	59.50	65.82	75.64	65.79	67.21	78.44	83.62	80.46	59.74
Hams, skinned, 14-17 lb.	78.22	67.50	80.01	98.98	72.66	70.98	78.91	79.93	86.15	93.58
<b>Commercial slaughter (thou head)*</b>										
Cattle	37,582	36,293	37,288	3,128	2,971	2,872	3,035	3,098	3,054	3,070
Steers	17,474	16,912	17,516	1,499	1,523	1,438	1,527	1,562	1,492	1,424
Heifers	10,691	11,237	11,097	957	855	852	901	915	958	1,055
Cows	8,617	7,391	7,960	608	534	522	547	561	547	527
Bulls & stags	789	758	715	64	59	60	60	60	58	64
Calves	3,297	3,385	3,408	281	228	202	227	232	214	243
Sheep & lambs	6,759	6,165	5,635	511	496	373	421	426	416	474
Hogs	85,168	84,492	79,598	6,504	6,665	6,078	6,158	6,187	6,176	7,030
<b>Commercial production (mil lb)</b>										
Beef	23,418	23,557	24,213	2,050	1,928	1,851	1,958	2,017	2,005	2,041
Veal	479	499	509	43	34	32	35	34	30	36
Lamb & mutton	371	352	331	30	29	22	24	25	24	28
Pork	14,720	14,728	13,988	1,137	1,169	1,070	1,086	1,082	1,074	1,228
	Annual			1986			1987			
	1984	1985	1986	II	III	IV	I	II	III	IV
<b>Cattle on feed (13-States)</b>										
Number on feed (thou head) 1/	9,908	10,653	9,754	8,945	7,970	8,197	9,235	8,797	8,666	8,992
Placed on feed (thou head)	24,917	23,366	23,553	5,221	6,336	6,726	5,700	5,961	6,557	---
Marketings (thou head)	22,540	22,887	22,836	5,821	5,876	5,376	5,767	5,669	5,986	5/5,514
Other disappearance (thou head)	1,632	1,398	1,236	375	233	312	371	423	245	---
<b>Hogs &amp; pigs (10-States) 4/</b>										
Inventory (thou head) 1/	42,420	41,100	39,870	38,210	37,845	39,335	39,870	39,235	40,580	42,825
Breeding (thou head) 1/	5,348	5,258	5,155	4,948	4,840	4,840	5,155	5,230	5,290	5,295
Market (thou head) 1/	37,072	35,842	34,715	33,262	33,005	34,495	34,715	34,005	35,290	37,530
Farrowings (thou head)	9,020	8,831	8,208	2,161	2,034	2,150	1,957	2,337	2,262	5/2,307
Pig crop (thou head)	67,680	67,648	63,714	16,878	15,853	16,729	15,156	18,485	17,520	---

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentions. \*Classes estimated.

Information Contact: Ron Gustafson or Leland Southard (202) 786-1830.

# Crops and Products

Table 17.—Supply & Utilization<sup>1,2</sup>

	Area				Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price
	Set aside	Planted	Harvested	Yield								
	3/					4/						5/
	Mill. acres			Bu/acre				Mill. bu				\$/bu
<b>Wheat</b>												
1982/83	5.8	86.2	77.8	35.5	2,765	3,932	195	713	1,509	2,417	1,515	3.45
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.51
1984/85	18.6	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1985/86*	18.8	75.6	64.7	37.5	2,425	3,866	270	776	915	1,961	1,905	3.08
1986/87*	21.0	72.1	60.7	34.4	2,092	4,018	386	808	1,004	2,197	1,821	2.42
1987/88*	23.9	65.8	55.9	37.6	2,105	3,941	375	830	1,275	2,480	1,461	2.40-2.60
	Mill. acres			lb/acre				Mill. cwt (rough equiv.)				\$/cwt
<b>Rice</b>												
1982/83	0.42	3.30	3.26	4,710	153.6	203.4	--	6/52.9	68.9	131.5	71.5	7.91
1983/84	1.74	2.19	2.17	4,598	89.7	171.8	--	6/54.7	70.3	125.0	46.9	8.57
1984/85	.79	2.83	2.80	4,954	138.8	187.3	--	6/60.5	62.1	122.6	64.7	8.04
1985/86*	1.24	2.51	2.49	5,414	134.9	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1986/87*	1.26	2.40	2.38	5,648	134.4	214.3	--	6/73.8	85.4	159.2	55.1	3.80
1987/88*	1.38	2.34	2.33	5,547	129.4	187.1	--	6/77.0	80.0	157.0	30.1	6.00-7.00
	Mill. acres			Bu/acre				Mill. bu				\$/bu
<b>Corn</b>												
1982/83	2.1	81.8	72.7	113.2	8,235	10,772	4,521	894	1,834	7,249	3,523	2.55
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1984/85	3.9	80.5	71.9	106.7	7,674	8,684	4,079	1,091	1,865	7,036	1,648	2.63
1985/86*	5.4	83.4	75.2	118.0	6,877	10,536	4,095	1,160	1,241	6,495	4,040	2.23
1986/87*	13.6	76.7	69.2	119.3	8,253	12,294	4,717	1,191	1,504	7,412	4,882	1.50
1987/88*	21.1	66.0	59.6	120.3	7,166	12,050	4,800	1,225	1,700	7,725	4,325	1.60-1.80
	Mill. acres			Bu/acre				Mill. bu				\$/bu
<b>Sorghum</b>												
1982/83	0.7	16.0	14.1	59.1	835	1,154	495	10	210	715	439	2.47
1983/84	9.7	11.8	10.0	48.7	488	927	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86*	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87*	2.3	15.3	13.9	67.7	942	1,493	548	15	198	761	732	1.37
1987/88*	3.8	11.8	10.5	71.1	747	1,478	550	15	225	790	688	1.50-1.75
	Mill. acres			Bu/acre				Mill. bu				\$/bu
<b>Barley</b>												
1982/83	0.4	9.5	9.0	57.2	516	675	241	170	47	458	217	2.18
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.47
1984/85	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86*	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87*	1.8	13.1	12.0	50.8	611	942	276	174	137	586	356	1.61
1987/88*	2.9	11.0	10.0	51.7	518	878	275	175	125	575	304	1.70-2.00
	Mill. acres			Bu/acre				Mill. bu				\$/bu
<b>Oats</b>												
1982/83	0.1	14.0	10.3	57.8	593	749	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86*	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	.4	14.7	6.8	56.3	386	603	395	73	3	471	133	1.21
1987/88*	.9	18.0	6.9	53.3	369	537	350	75	1	426	111	1.40-1.70
	Mill. acres			Bu/acre				Mill. bu				\$/bu
<b>Soybeans</b>												
1982/83	0	70.9	69.4	31.5	2,190	2,444	7/86	1,108	905	2,099	345	5.69
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/79	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86*	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	60.4	58.3	33.3	1,940	2,476	7/104	1,178	757	2,040	436	4.80
1987/88*	0	58.7	57.6	34.1	1,960	2,396	7/96	1,200	725	2,021	375	5.10
	Mill. acres			Bu/acre				Mill. bu				\$/bu
<b>Soybean oil</b>												
1982/83	--	--	--	--	12,041	13,144	--	9,858	2,025	11,883	1,261	20.6
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.6
1984/85	--	--	--	--	11,468	12,209	--	9,917	1,660	11,577	632	29.5
1985/86*	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.0
1986/87*	--	--	--	--	12,767	13,729	--	10,853	1,138	12,003	1,726	15.4
1987/88*	--	--	--	--	13,074	14,800	--	11,250	1,400	12,650	2,150	16.5
	Thou. tons							Thou. tons				\$/ton
<b>Soybean meal</b>												
1982/83	--	--	--	--	26,714	26,889	--	19,306	7,109	26,415	474	187
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,975	255	188
1984/85	--	--	--	--	24,529	24,784	--	18,480	4,917	24,397	387	125
1985/86*	--	--	--	--	24,951	25,338	--	19,080	6,036	25,126	212	155
1986/87*	--	--	--	--	27,758	27,970	--	20,430	7,300	27,730	240	163
1987/88*	--	--	--	--	28,360	28,600	--	21,200	7,100	28,300	300	163

See footnotes at end of table.



Table 17.— Supply &amp; Utilization, continued

Table 17: Supply & Utilization, continued												
	Area			Yield	Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm Price
	Set aside	Planted	Harvested									
	3/					4/						5/
	Mill. acres		lb/acre								c/lb	
Cotton 10/												
1982/83	1.6	11.3	8.7	890	12.0	18.6	--	5.5	5.2	10.7	7.9	59.5
1983/84	6.8	7.9	7.3	508	7.8	15.7	--	5.9	6.8	12.7	2.8	65.3
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.7
1985/86*	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	9.8	56.5
1986/87*	3.3	10.0	8.5	552	9.7	18.1	--	7.4	6.7	14.1	5.0	52.2
1987/88*	3.1	10.8	10.0	671	13.9	19.0	--	7.8	7.2	15.0	4.1	--

\*November 9, 1987 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, corn, and sorghum; October 1 for soybean meal and soybean oil. 2/ Conversion factors: Hectare (ha) = 2.471 acres; 1 metric ton = 2204.622 pounds; 36.7437 bushels of wheat or soybeans; 39.3679 bushels of corn or sorghum; 45.9296 bushels of barley; 68.8844 bushels of oats; 22.045 cwt. of rice; and 4.59 480-pound bales of cotton. 3/ Includes diversion, Pk. acreage reduction and conservation reserve programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 Percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.— Food Grains

	Marketing year 1/				1986	1987				
	1983/84	1984/85	1985/86	1986/87	Sept	May	June	July	Aug	Sept
Wholesale Prices										
Wheat, No. 1 HRW,										
Kansas City (\$/bu) 2/	3.84	3.74	3.28	2.72	2.53	3.02	2.70	2.59	2.65	2.78
Wheat, DNS,										
Minneapolis (\$/bu) 2/	4.21	3.70	3.25	2.62	2.64	2.76	2.66	2.52	2.60	2.74
Rice, S.W. La. (\$/cwt) 3/	19.38	17.98	16.11	10.25	10.25	10.38	10.50	10.50	11.00	12.25
Wheat										
Exports (mil bu)	1,429	1,424	815	1,004	104	72	126	166	118	NA
Mill grind (mil bu)	694	676	711	779	68	68	65	63	66	NA
Wheat flour production (mil cwt)	308	301	320	351	30	30	29	28	30	NA
Rice										
Exports (mil cwt, rough equiv)	70.3	62.1	58.7	85.4	12.1	8.0	3.6	10.0	NA	NA

	Marketing year 1/				1986	1987				
	1984/85	1985/86	1986/87	Jan-Mar	Apr-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug
Wheat										
Stocks, beginning (mil bu)	1,399	1,425	1,905	2,526.1	2,130.0	1,905.0	3,154.6	2,671.5	2,249.8	1,820.9
Domestic use:										
Food (mil bu)	651	683	714	166.9	110.7	174.1	192.2	177.2	180.2	184.9
Feed & seed (mil bu) 4/	502	363	548	4.9	1.8	346.8	31.1	47.6	38.7	374.8
Exports (mil bu)	1,424	915	1,004	226.1	115.3	320.6	263.4	202.7	216.8	419.9

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Allen Schlenwein and Janet Livezey (202) 786-1840.

Table 19.— Cotton

	Marketing year 1/				1986	1987				
	1983/84	1984/85	1985/86	1986/87	Sept	May	June	July	Aug	Sept
U.S. price, SLM,										
1-1/16 in. (cts/lb) 2/	73.1	60.5	60.0	53.2	33.6	65.9	70.4	73.1	75.9	71.4
Northern Europe Prices:										
Index (cts/lb) 3/	87.6	69.2	48.9	62.0	43.5	76.6	79.3	83.2	86.6	83.6
U.S. M 1-3/32 in. (cts/lb) 4/	87.1	73.9	64.8	61.8	44.7	75.1	76.2	81.8	87.4	83.1
U.S. mill consumption (thou bales)	5,927	5,545	6,399	7,452	603	642	655	655	666	703
Exports (thou bales)	6,786	6,201	1,969	6,684	387	488	468	575	420	319
Stocks, beginning (thou bales)	7,937	2,775	4,102	9,348	9,016	8,428	7,298	6,176	5,026	4,381

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) Index; average of five lowest priced of 10 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed Grains

	Marketing year 1/				1986	1987				
	1983/84	1984/85	1985/86	1986/87	Sept	May	June	July	Aug	Sept
<b>Wholesale prices</b>										
Corn, No. 2 yellow, Chicago (\$/bu)	3.46	2.78	2.35	1.64	1.49	1.89	1.88	1.68	1.53	1.63
Sorghum, No. 2 yellow, Kansas City (\$/cut)	5.22	4.46	3.72	2.73	2.47	3.10	3.20	2.80	2.55	2.65
Barley, feed, Minneapolis (\$/bu) 2/	2.48	2.09	1.53	1.50	1.27	1.86	1.73	1.59	1.60	1.76
Barley, malting, Minneapolis (\$/bu)	2.84	2.55	2.24	1.89	1.76	2.42	2.07	1.93	1.73	1.98
<b>Exports</b>										
Corn (mil bu)	1,902	1,865	1,241	1,504	81	171	121	135	112	NA
Feed grains (mil metric tons) 3/	56.5	56.6	36.6	46.3	2.7	4.9	3.4	4.2	3.2	NA

	Marketing year 1/				1986			1987		
	1983/84	1984/85	1985/86	1986/87	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug
Corn										
Stocks, beginning (mil bu)	3,523	1,006	1,648	4,040	6,587	4,990	4,040	10,304	8,248	6,332
Domestic use:										
Feed (mil bu)	3,818	4,079	4,095	4,717	1,086	494	1,388	1,471	1,089	749
Food, seed, ind. (mil bu)	975	1,091	1,160	1,191	309	308	280	270	325	315
Exports (mil bu)	1,902	1,865	1,241	1,504	204	154	321	315	502	386
Total use (mil bu)	6,694	7,036	6,496	7,412	1,599	956	1,989	2,056	1,917	1,451

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Aggregated data for corn, sorghum, oats, and barley. NA = not available.

Information contacts: Larry Van Meir (202) 786-1840.

Table 21.—Fats &amp; Oils

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	Aug	Apr	May	June	July	Aug
<b>Soybeans</b>										
Wholesale price, No. 1 yellow, Chicago (\$/bu) 2/	6.11	7.78	5.88	5.20	4.71	5.10	5.46	5.56	5.31	5.02
Crushings (mil bu)	1,107.8	982.7	1,030.5	1,052.8	78.4	95.9	95.3	90.6	92.6	82.4
Exports (mil bu)	905.2	742.8	598.2	740.0	20.4	53.9	37.6	37.9	54.3	54.5
Stocks, beginning (mil bu)	254.5	344.6	175.7	316.0	40.2	90.2	85.2	72.9	63.6	49.8
<b>Soybean oil</b>										
Wholesale price, crude, Decatur (cts/lb)	20.62	30.55	29.52	18.0	14.28	15.31	16.22	15.96	15.41	15.16
Production (mil lb)	12,040.4	10,872.0	11,467.9	11,620.4	875.3	1,047.1	1,037.6	980.9	1,013.7	891.3
Domestic disp. (mil lb)	9,857.3	9,598.6	9,916.7	10,062.8	856.3	1,027.1	918.2	973.2	992.5	871.0
Exports (mil lb)	2,024.7	1,813.6	1,659.8	1,257.2	187.7	28.2	47.4	85.0	175.6	261.0
Stocks, beginning (mil lb)	1,102.5	1,260.9	720.5	632.5	1,320.8	2,352.3	2,344.1	2,416.0	2,338.6	2,184.2
<b>Soybean meal</b>										
Wholesale price, 44% protein, Decatur (\$/ton)	187.19	188.21	125.46	154.90	163.50	159.00	174.90	187.10	181.25	169.90
Production (thou ton)	26,713.6	22,756.2	24,529.3	24,957.8	1,863.4	2,256.4	2,245.6	2,134.9	2,185.2	1,948.9
Domestic disp. (thou ton)	19,306.0	17,615.2	19,481.7	19,122.3	1,470.7	1,593.4	1,740.1	1,739.5	1,673.2	1,558.5
Exports (thou ton)	7,108.7	5,359.7	4,916.5	6,007.0	345.0	654.8	427.8	455.8	480.3	382.0
Stocks, beginning (thou ton)	175.2	474.1	255.4	387.0	250.6	235.8	244.0	321.7	261.3	292.9
<b>Margarine, wholesale price,</b>										
Chicago, white (cts/lb)	41.1	46.3	55.4	42.1	37.94	39.38	40.43	39.50	38.88	39.20

1/ Beginning September 1 for soybeans; October 1 for soybean meal and oil; calendar year for margarine. 2/ Beginning April 1, 1982. Prices based on 30-day delivery, using upper end of the range. NA = Not available.

Information contacts: Roger Harkin (202) 786-1840; Tom Bickerton (202) 786-1691.



Table 22.—Farm Programs, Price Supports, Participation &amp; Payment Rates

	Target Price	Loan rate	Findley loan rate	Payment rates			Base acres	Program 1/ 2/	Partici- pation rate 2/ 3/
				Deficiency	Paid land diver- sion	PIK			
				\$/bu.		Percent 3/	Mill. acres		Percent of base
<b>Wheat</b>									
1982/83	4.05	3.55		.50			90.7	15/0/0	48
1983/84	4.30	3.65		.65	2.70	85	90.8	15/5/10-30	78/78/51
1984/85	4.38	3.30		1.00	2.70	85	91.0	20/10/10-20	60/60/20
1985/86	4.38	3.30		1.08	2.70		94.0	20/10/0	73
1986/87 4/	4.38	3.00	2.40	1.98	2.00	1.10	91.7	22.5/5 or 10/2.5	84/21/84
1987/88	4.38	2.85	2.28	2.10			89.6	27.5/0/0	83
<b>\$/cwt</b>									
<b>Rice</b>									
1982/83	10.85	8.14		2.71			3.97	15/0/0	78
1983/84	11.40	8.14		2.77	2.70	80	3.95	15/5/10-30	98/98/87
1984/85	11.90	8.00		3.76			4.16	25/0/0	85
1985/86	11.90	8.00	5/3.40	3.90	3.50		4.23	20/15/0	89
1986/87 4/	11.90	7.20	5/3.45	4.70			4.20	35/0/0	92
1987/88	11.66	6.84	5/3.50	4.82			4.22	35/0/0	93
<b>\$/bu.</b>									
<b>Corn</b>									
1982/83	2.70	5/2.55		.15			81.2	10/0/0	29
1983/84	2.86	2.65		0	1.50	80	82.6	10/10/10-30	71/71/60
1984/85	3.03	2.55		.43			80.8	10/0/0	54
1985/86	3.03	2.55		.48			84.2	10/0/0	69
1986/87 4/	3.03	2.40	1.82	1.11	.73		81.8	17.5/2.5/0	85
1987/88	3.03	2.28	1.82	1.21	2.00		83.3	20/18/0	88/55
<b>\$/bu.</b>									
<b>Sorghum</b>									
1982/83	2.60	2.42		.18			17.7	7/[same]	47
1983/84	2.72	2.52		0	1.50	80	18.0		72/72/53
1984/85	2.88	2.42		.46			18.2		42
1985/86	2.88	2.42		.46			19.3		55
1986/87 4/	2.88	2.28	1.82	1.06	.65		18.7		75
1987/88	2.88	2.18	1.74	1.14	1.90		18.1		83/42
<b>\$/bu.</b>									
<b>Barley</b>									
1982/83	2.60	2.08		.40			10.5	7/[same]	46
1983/84	2.60	2.16		.21	1.00		11.0		55/55/0
1984/85	2.60	2.08		.26			11.6		44
1985/86	2.60	2.08		.52			13.3		57
1986/87 4/	2.60	1.95	1.56	1.04	.57		12.4		73
1987/88	2.60	1.86	1.49	1.11	1.60		12.9		82/23
<b>\$/bu.</b>									
<b>Oats</b>									
1982/83	1.50	1.31		0			10.4	7/[same]	14
1983/84	1.60	1.36		.11	.75		9.8		20/20/0
1984/85	1.60	1.31		0			9.8		14
1985/86	1.60	1.31		.29			9.4		14
1986/87 4/	1.60	1.24	.99	.50	.36		9.5		37
1987/88	1.60	1.18	.94	.55	.80		8.7		44/15
<b>\$/bu.</b>									
<b>Soybeans 8/</b>									
1982/83		5.02							
1983/84		5.02							
1984/85		5.02							
1985/86		5.02							
1986/87 4/		5.02	4.77						
1987/88		5.02	4.77						
<b>\$/lb.</b>									
<b>Upland cotton</b>									
1982/83	71.0	57.10		13.92			15.3	15/0/0	78
1983/84	76.0	55.00		12.10	25.00	85	15.4	20/5/10-30	93/93/77
1984/85	81.0	55.00		18.60			15.6	25/0/0	70
1985/86	81.0	57.30		23.70	30.00		15.8	20/10/0	82/0/0
1986/87 4/	81.0	55.00	9/44.00	26.00			15.6	25/0/0	91
1987/88	79.40	52.25	10/	27.15			15.0	25/0/0	83

1/ Percentage of base acres farmers participating in acreage reduction programs/paid land diversion/PIK were required to devote to conserving uses to receive program benefits. In addition to the percentages shown for 1983/84, farmers had the option of submitting bids to retire their entire base acreages. 2/ Percentage of base acres enrolled in acreage reduction programs/paid land diversion/PIK. 3/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1983 and 1984 PIK rates apply only to the 10-30 and 10-20 portions, respectively. 4/ Payment rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 5/ Annual average world market price. 6/ The Reserve loan rate was \$2.90. 7/ The sorghum, barley, and oat programs were the same as for corn each year except 1983/84, when PIK was not offered on barley and oats. 8/ There are no target prices, acreage programs, or payment rates for soybeans. 9/ Loan repayment rate. 10/ Loans may be repaid at the lower of the loan rate or world market prices.

Information contact: Larry Van Meir (202) 786-1840.

Table 23.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P
<b>Citrus</b>												
Production (thou ton)	14,788	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,488	11,074	11,952
Per capita consumption (lbs) 1/	119.3	117.2	124.5	107.4	108.5	112.7	104.7	109.6	120.2	102.8	115.7	109.8
<b>Non citrus</b>												
Production (thou tons)	12,384	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,292	14,188	13,861
Per capita consumption (lbs) 1/	85.8	84.2	84.3	82.5	85.8	87.3	88.1	89.0	89.0	93.7	92.6	95.3
	1986						1987					
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
<b>Fob shipping point prices</b>												
Apples (\$/canton) 2/	13.70	13.63	14.00	10.67	14.00	14.50	15.35	16.63	17.60	14.34	11.60	NA
Pears (\$/box) 3/	15.00	15.10	14.50	16.00	15.63	14.75	14.10	15.28	21.00	NA	NA	NA
Oranges (\$/box) 4/	5.81	4.84	3.90	4.01	4.83	4.68	5.15	5.62	6.47	6.29	6.16	7.36
Grapefruit (\$/box) 4/	6.53	6.46	5.69	5.80	4.72	2.64	1.85	2.27	4.34	5.58	5.95	5.07
<b>Stocks, ending</b>												
Fresh apples (mil lbs)	4,142.7	3,532.2	2,891.7	2,307.2	1,720.2	1,174.0	751.9	386.3	203.8	74.9	4.1	2,684.2
Fresh pears (mil lbs)	333.2	281.2	214.7	170.9	127.1	92.1	53.7	21.1	1.7	11.8	195.2	505.4
Frozen fruits (mil lbs)	855.6	777.5	720.9	632.3	563.0	497.7	495.6	510.6	625.9	865.7	908.3	911.3
Frozen orange juice (mil lbs)	577.6	524.8	621.2	877.8	1,015.7	937.1	984.8	1,112.6	1,108.6	945.9	797.6	887.0

1/ Per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 2/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 3/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 4/ U.S. Equivalent on-tree returns. NA = not available. P = preliminary.

Information contact: Ben Huang (202) 786-1767.

Table 24.—Vegetables

	Calendar years											
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986		
<b>Production</b>												
Total vegetables (1,000 cwt) 1/	402,936	382,165	413,925	381,370	379,123	431,515	403,320	457,392	453,769	445,436		
Fresh (1,000 cwt) 1/ 2/	176,541	182,563	190,859	190,228	194,694	207,924	187,919	217,132	217,932	216,267		
Processed (tons) 3/	11,319,750	8,980,100	11,153,300	9,557,100	9,221,460	11,179,580	10,270,050	12,013,020	11,783,240	11,616,560		
Mushrooms (1,000 lbs)	398,703	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956	NA		
Potatoes (1,000 cwt)	355,334	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	354,468		
Sweet potatoes (1,000 cwt)	11,885	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,674		
Dry edible beans (1,000 cwt)	16,555	18,935	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,898		
	1986						1987					
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
<b>Shipments</b>												
Fresh (1,000 cwt) 4/	15,174	19,275	15,967	15,766	20,607	18,066	22,286	20,011	23,887	35,745	23,791	16,728
Potatoes (1,000 cwt)	7,907	11,332	9,928	10,836	14,569	10,881	15,668	13,560	12,165	12,622	7,631	8,768
Sweet potatoes (1,000 cwt)	246	428	706	389	279	259	293	299	177	98	34	134

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop, all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop, all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. NA = not available.

Information contact: Shannon Hamm or Cathy Greene (202) 786-1767

Table 25.—Other Commodities

	Calendar years											
	Annual					1986		1987				
	1982	1983	1984	1985	1986 F	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept		
<b>Sugar</b>												
Production 1/	5,936	5,682	5,890	5,969	6,257	685	3,231	2,024	766	866		
Deliveries 1/	9,153	8,812	8,454	8,035	7,786	2,069	1,991	1,908	2,002	2,097		
Stocks, ending 1/	3,068	2,570	3,005	3,126	3,227	1,652	3,227	3,497	2,476	1,514		
<b>Coffee</b>												
Composite green price N.Y. (cts/lb)	132.00	131.51	142.85	137.46	185.18	174.92	159.69	115.38	105.91	99.14		
Imports, green bean equiv. (million lbs) 2/	2,352	2,259	2,411	2,550	2,596	635	498	563	790	651		
	Annual					1986		1987				
	1984	1985	1986	July	Feb	Mar	Apr	May	June	July		
<b>Tobacco</b>												
Prices at auctions 3/												
Flue-cured (dol/lb)	1.81	1.72	1.52	NQ	NQ	NQ	NQ	NQ	NQ	NQ		
Burley (dol/lb)	1.88	1.59	1.57	NQ	1.57	NQ	NQ	NQ	NQ	NQ		
<b>Domestic consumption 4/</b>												
Cigarettes (bil)	600.4	594.0	584.0	38.4	42.7	53.0	42.2	51.0	61.8	37.9		
Large cigars (mil)	3,493	3,226	3,090	270.4	213.4	235.5	212.7	233.1	290.7	193.0		

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. F = forecast. NQ = no quota.

Information contacts: (sugar) Dave Harvey (202) 786-1769; (coffee) Fred Gray (202) 786-1769; (tobacco) Verner Grise (202) 786-1768.



Table 26.—World Supply &amp; Utilization of Major Crops, Livestock, &amp; Products

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 F	1987/88 F
Million units							
<b>Wheat</b>							
Area (hectare)	238.7	237.7	229.1	231.4	229.3	228.3	219.9
Production (metric ton)	449.5	477.5	489.4	511.5	499.2	528.9	500.8
Exports (metric ton) 1/	101.3	98.7	102.0	107.0	84.8	91.4	97.8
Consumption (metric ton) 2/	443.6	462.2	482.2	495.6	487.3	517.9	517.4
Ending stocks (metric ton) 3/	87.0	102.3	109.5	125.3	137.2	148.3	131.8
<b>Coarse grains</b>							
Area (hectare)	349.9	339.7	335.3	335.5	339.7	336.2	327.2
Production (metric ton)	766.0	784.4	687.0	813.8	842.9	834.7	797.3
Exports (metric ton) 1/	96.6	89.6	93.0	100.6	83.2	83.8	85.0
Consumption (metric ton) 2/	737.7	753.1	761.8	782.9	768.5	804.1	818.4
Ending stocks (metric ton) 3/	120.7	151.8	77.2	108.0	182.5	213.1	192.0
<b>Rice, milled</b>							
Area (hectare)	145.2	141.1	144.3	144.4	144.7	145.3	140.9
Production (metric ton)	280.6	285.7	308.0	319.2	320.1	316.6	300.1
Exports (metric ton) 4/	11.8	11.9	12.6	11.5	12.8	12.3	10.2
Consumption (metric ton) 2/	281.5	290.3	308.7	313.8	316.1	319.0	308.3
Ending stocks (metric ton) 3/	21.3	17.3	17.2	22.3	26.4	24.1	15.9
<b>Total grains</b>							
Area (hectare)	733.8	718.5	708.7	711.3	713.7	709.8	688.0
Production (metric ton)	1,496.1	1,547.6	1,484.4	1,644.5	1,662.2	1,680.2	1,588.3
Exports (metric ton) 1/	209.7	200.2	207.6	219.1	180.8	187.5	193.0
Consumption (metric ton) 2/	1,462.8	1,505.6	1,552.7	1,592.3	1,571.9	1,641.0	1,644.1
Ending stocks (metric ton) 3/	229.0	271.4	203.9	255.6	346.1	385.5	339.7
<b>Oilseeds</b>							
Crush (metric ton)	138.9	143.5	136.3	150.6	154.0	158.4	162.0
Production (metric ton)	169.4	178.2	165.5	191.3	196.0	194.3	202.8
Exports (metric ton)	35.9	35.2	33.0	33.0	34.4	37.7	37.8
Ending stocks (metric ton)	13.5	20.5	15.8	21.2	26.8	23.5	23.9
<b>Meals</b>							
Production (metric ton)	94.5	98.1	92.8	101.8	104.2	108.0	110.7
Exports (metric ton)	28.8	31.6	29.7	32.3	34.2	36.2	35.8
<b>Oils</b>							
Production (metric ton)	41.6	43.4	42.2	46.1	49.2	49.5	51.1
Exports (metric ton)	13.4	14.0	13.7	15.6	16.4	16.5	16.9
<b>Cotton</b>							
Area (hectare)	33.0	31.4	31.0	33.9	31.9	30.0	32.1
Production (bale)	71.2	68.1	67.7	88.1	79.1	69.5	77.1
Exports (bale)	20.2	19.4	19.2	20.5	20.5	25.7	24.4
Consumption (bale)	66.2	68.3	68.7	70.4	76.7	83.1	82.4
Ending stocks (bale)	25.2	25.1	25.1	42.3	45.5	31.6	26.1
	1982	1983	1984	1985	1986	1987 F	1988 F
<b>Red meat</b>							
Production (mil metric tons)	94.8	97.5	99.3	103.3	105.6	105.3	107.2
Consumption (mil metric tons)	93.3	95.8	97.4	101.2	104.7	103.7	105.8
Exports (mil metric tons) 1/	5.8	5.9	5.9	6.2	6.6	6.5	6.7
<b>Poultry</b>							
Production (mil metric tons)	23.7	24.4	25.2	26.2	27.3	29.0	30.1
Consumption (mil metric tons)	23.3	24.3	24.8	25.9	26.9	28.5	29.7
Exports (mil metric tons) 1/	1.4	1.3	1.3	1.2	1.3	1.4	1.4
<b>Dairy</b>							
Milk production (mil metric tons)	396.9	412.5	413.0	417.9	422.8	423.6	NA

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1982 data correspond with 1981/82, etc. F = forecast. NA = not available.

Information contact: Frederic Suris (202) 786-1693.

# U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1986		1987				
	1984	1985	1986	Sept	Apr	May	June	July	Aug	Sept
<b>Export commodities</b>										
Wheat, f.o.b. vessel, Gulf ports (\$/bu)	4.17	3.73	3.19	2.83	3.13	3.28	2.99	2.89	2.95	3.09
Corn, f.o.b. vessel, Gulf ports (\$/bu)	3.50	2.89	2.27	1.71	1.93	2.08	2.08	1.96	1.82	1.89
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu)	3.00	2.64	2.16	1.73	1.86	2.01	2.01	1.90	1.74	1.78
Soybeans, f.o.b. vessel, Gulf ports (\$/bu)	7.38	5.83	5.45	5.37	5.35	5.71	5.82	5.74	5.51	5.53
Soybean oil, Decatur (cts/lb)	30.75	27.03	16.36	13.84	15.03	15.93	15.57	15.05	14.93	15.26
Soybean meal, Decatur (\$/ton)	166.80	127.15	157.62	166.19	158.48	175.70	187.25	179.84	168.93	178.96
Cotton, 8 market avg spot (cts/lb)	68.37	58.55	53.47	33.56	57.72	65.94	70.42	73.06	75.89	71.41
Tobacco, avg. price at auction (cts/lb)	170.64	172.05	153.93	151.80	145.59	145.59	145.59	141.80	141.45	152.15
Rice, f.o.b. mill, Houston (\$/cwt)	19.47	18.49	14.60	13.00	10.50	10.50	10.50	10.50	10.50	11.75
Inedible tallow, Chicago (cts/lb)	17.47	14.33	9.03	8.10	12.98	15.13	14.73	15.17	14.50	15.53
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb)	1.46	1.42	2.01	2.03	1.02	1.09	1.08	1.00	.96	.97
Rubber, N.Y. spot (cts/lb)	49.70	41.91	42.87	45.29	47.39	49.06	50.58	53.47	53.73	54.17
Cocoa beans, N.Y. (\$/lb)	1.06	.99	.88	.96	.90	.90	.87	.93	.89	.87

Information Contact: Mary Teymourian (202) 786-1692.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1986		1987									
	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
Total U.S. trade 1/												
Nominal	108	107	101	99	99	97	96	98	99	99	97	97
Agricultural trade												
Nominal 2/	4,794	4,903	5,238	6,102	6,954	7,783	8,838	12,507	14,245	14,933	15,794	16,859
Real 3/	90	88	86	85	85	83	83*	85*	85*	85*	84*	83*
Soybeans												
Nominal 2/	294	305	314	327	343	358	374	394	412	428	444	460
Real 3/	76	75	72	71	71	69	69*	70*	71*	71*	69*	69*
Wheat												
Nominal 2/	27,020	27,616	29,557	34,601	39,700	44,815	57,302	73,477	83,997	88,101	93,144	99,717
Real 3/	110	107	105	104	106	103	104*	106*	106*	104*	103*	102*
Corn												
Nominal 2/	4,430	4,534	4,842	5,631	6,407	7,158	9,020	11,436	13,013	13,642	14,427	15,392
Real 3/	80	79	76	76	76	74	73*	74*	75*	74*	73*	72*
Cotton												
Nominal 2/	237	237	234	233	233	272	270	269	269	269	292	267
Real 3/	92	92	91	90	90	89	87*	87*	88*	87*	86*	86*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S. dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S. total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. \*Preliminary.

Information contact: Edward Wilson (202) 786-1688.

Table 29.—U.S. Trade Balance

	Fiscal years*									Aug
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F	1987
\$ million										
<b>Exports</b>										
Agricultural	31,979	40,481	43,780	39,085	34,769	38,027	31,201	26,325	27,500	2,135
Nonagricultural	135,839	169,846	185,423	176,310	159,373	170,014	179,236	176,613	NA	17,369
Total 1/	167,818	210,327	229,203	215,405	194,142	208,041	210,437	202,938	NA	19,504
<b>Imports</b>										
Agricultural	16,186	17,276	17,218	15,481	16,271	18,916	19,740	20,875	20,000	1,535
Nonagricultural	177,424	223,590	237,469	233,353	230,629	297,736	313,722	342,855	NA	32,436
Total 2/	193,610	240,866	254,687	248,834	246,900	316,652	333,462	363,730	NA	33,971
<b>Trade balance</b>										
Agricultural	15,793	23,205	26,562	23,614	18,498	19,111	11,461	5,450	7,500	600
Nonagricultural	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,486	-166,242	NA	-15,067
Total	-25,792	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,792	NA	-14,467

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. 1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value). NA = not available. F = forecast.

Information Contact: Steve MacDonald (202) 786-1621.



Table 30.—U.S. Agricultural Exports &amp; Imports

	Fiscal years*				Aug	Fiscal years*				Aug
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	Thousand units					\$ million				
Exports										
Animals, live (no) 1/	754	996	570	--	23	276	255	344	--	35
Meats & preps., excl. poultry (mt)	422	427	451	2/500	43	929	906	1,012	--	104
Dairy products (mt)	418	423	481	--	43	393	414	430	500	51
Poultry meats (mt)	225	234	265	400	38	280	257	282	--	40
Fats, oils, & greases (mt)	1,395	1,217	1,355	3/1,200	91	703	608	477	--	33
Hides & skins incl. furskins	--	--	--	--	--	1,318	1,325	1,456	--	128
Cattle hides, whole (no) 1/	24,283	25,456	25,973	--	1,962	1,010	1,019	1,150	--	110
Mink pelts (no) 1/	2,551	2,237	2,697	--	51	67	60	65	--	2
Grains & feeds (mt)	108,194	93,903	74,437	--	7,361	17,304	13,285	9,476	4/9,500	742
Wheat (mt)	41,699	28,523	25,490	29,000	3,069	6,497	4,264	3,259	5/3,100	293
Wheat flour (mt)	1,071	718	1,137	1,400	94	234	164	204	--	16
Rice (mt)	2,293	1,972	2,382	2,400	233	897	677	648	600	49
Feed grains, incl. products (mt)	55,546	55,362	36,293	47,800	3,227	8,217	6,884	3,819	3,800	264
Feeds & fodders (mt)	7,021	6,533	8,381	6/10,000	696	1,216	1,004	1,289	--	100
Other grain products (mt)	564	795	754	--	58	243	293	257	--	24
Fruits, nuts, and preps. (mt)	1,931	1,907	2,003	--	160	1,594	1,687	1,766	--	160
Fruit juices incl. froz. (hl) 1/	5,598	4,641	3,652	--	321	223	200	148	--	14
Vegetables & preps. (mt)	1,527	1,420	1,467	--	89	999	946	1,000	--	68
Tobacco, unmanufactured (mt)	227	257	224	200	7	1,433	1,588	1,318	1,200	35
Cotton, excl. linters (mt)	1,481	1,277	482	1,500	92	2,395	1,945	678	1,900	117
Seeds (mt)	252	289	269	--	20	326	352	366	400	21
Sugar, cane or beet (mt)	285	355	375	--	25	74	65	75	--	6
Oilseeds & products (mt)	26,961	23,803	27,557	--	2,040	8,602	6,195	6,266	7/6,200	476
Oilseeds (mt)	20,466	17,086	20,684	8/20,500	1,526	6,254	4,324	4,394	--	327
Soybeans (mt)	19,265	16,621	20,139	20,100	1,485	5,734	3,876	4,174	3,900	309
Protein meal (mt)	5,060	4,606	5,588	6,800	358	1,217	853	1,127	1,300	75
Vegetable oils (mt)	1,435	1,311	1,284	--	155	1,131	1,018	746	--	74
Essential oils (mt)	11	12	7	--	1	96	105	105	--	9
Other	465	443	568	--	46	1,082	1,069	1,126	--	98
Total	143,794	125,967	109,941	129,000	10,056	38,027	31,201	26,325	28,000	2,135
Imports										
Animals, live (no) 1/	1,907	2,120	1,885	--	59	596	569	637	700	20
Meats & preps., excl. poultry (mt)	905	1,123	1,139	--	111	1,931	2,214	2,248	--	246
Beef & veal (mt)	550	674	693	730	70	1,165	1,295	1,252	1,400	145
Pork (mt)	328	416	406	440	38	703	847	900	1,100	93
Dairy products (mt)	382	418	400	410	31	757	763	786	800	70
Poultry and products 1/	--	--	--	--	--	122	93	101	--	9
Fats, oils, & greases (mt)	18	21	22	--	1	13	18	17	--	1
Hides & skins, incl. furskins 1/	--	--	--	--	--	216	240	200	--	23
Wool, unmanufactured (mt)	59	43	53	--	4	193	145	160	--	17
Grains & feeds (mt)	1,805	2,070	2,311	2,500	166	534	604	668	700	60
Fruits, nuts, & preps., excl. juices (mt)	4,036	4,483	4,637	4,850	322	1,634	1,891	1,976	2,300	151
Bananas & plantains (mt)	2,727	3,022	3,042	3,100	241	666	752	740	800	67
Fruit juices (hl) 1/	27,247	35,112	31,538	33,000	2,638	671	995	698	700	60
Vegetables & preps. (mt)	2,093	2,140	2,199	2,250	119	1,314	1,347	1,560	1,600	92
Tobacco, unmanufactured (mt)	190	191	208	210	22	563	556	605	600	68
Cotton, unmanufactured (mt)	32	31	41	--	2	17	17	14	--	0
Seeds (mt)	82	92	89	130	4	87	91	111	100	8
Nursery stock & cut flowers 1/	--	--	--	--	--	292	318	353	--	33
Sugar, cane or beet (mt)	2,829	2,338	1,905	1,500	60	1,144	912	654	--	17
Oilseeds & products (mt)	1,137	1,271	1,508	1,550	132	799	784	639	600	53
Oilseeds (mt)	223	253	197	--	16	85	98	69	--	5
Protein meal (mt)	118	159	138	--	24	21	17	15	--	3
Vegetable oils (mt)	797	859	1,173	--	92	683	670	555	--	45
Beverages excl. fruit juices (hl) 1/	14,120	15,494	15,488	--	1,354	1,547	1,622	1,848	--	156
Coffee, tea, cocoa, spices (mt)	1,776	1,868	1,940	1,870	146	4,777	4,983	6,099	5,000	324
Coffee, incl. products (mt)	1,128	1,128	1,223	1,170	91	3,300	3,244	4,400	3,300	196
Cocoa beans & products (mt)	451	539	507	520	40	1,058	1,285	1,189	1,200	88
Rubber & allied gums (mt)	809	799	801	800	60	854	680	615	700	56
Other	--	--	--	--	--	844	900	885	--	69
Total	--	--	--	--	--	18,916	19,740	20,875	20,500	1,535

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. -- not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-8/ are based on slightly different groups of commodities. Fiscal 1986 exports of categories used in the 1987 forecasts were: 2/ 413 thousand mt. 3/ 1,306 thousand mt. 4/ 9,648 million. 5/ 3,489 million. i.e. includes flour. 6/ 8,218 thousand mt. 7/ 6,439 million. 8/ 20,481 thousand mt. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal years*				Aug	Change from year* earlier				Aug
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	\$ million					Percent				
Western Europe	9,265	7,183	6,857	7,000	399	-9	-22	-5	2	20
European Community (EC-12)	8,650	6,688	6,442	6,600	372	9	-23	-3	2	25
Belgium-Luxembourg	836	470	361	--	31	3	-44	-23	--	121
France	510	396	431	--	27	-1	-22	9	--	17
Germany, Fed. Rep.	1,260	900	1,001	--	71	-13	-29	11	--	69
Italy	774	677	693	--	29	-4	-12	2	--	7
Netherlands	2,227	1,926	2,042	--	90	-21	-14	6	--	-15
United Kingdom	790	628	628	--	44	-4	-20	0	--	5
Portugal	702	502	308	--	26	10	-28	-39	--	100
Spain, incl. Canary Islands	1,232	832	723	--	34	3	-32	-13	--	113
Other Western Europe	615	515	415	400	27	-10	-16	-19	0	-25
Switzerland	311	232	128	--	5	-12	-26	-45	--	-38
Eastern Europe	741	532	447	500	13	-10	-28	-16	50	-43
German Dem. Rep.	132	81	52	--	1	7	-39	-36	--	100
Poland	197	126	42	--	2	-15	-36	-66	--	-67
Yugoslavia	180	137	134	--	3	-28	-24	-2	--	-75
Romania	155	88	112	--	7	35	-43	27	--	133
USSR	2,512	2,525	1,105	800	91	156	1	-56	-45	450
Asia	15,208	11,933	10,498	11,900	1,015	12	-22	-12	13	15
West Asia (Mideast)	1,865	1,452	1,243	1,700	159	26	-22	-14	34	37
Turkey	222	129	111	--	8	693	-42	-13	--	100
Iraq	423	371	321	--	62	31	-12	-13	--	170
Israel	351	300	255	--	21	20	-15	-15	--	-22
Saudi Arabia	497	381	335	--	37	11	-23	-12	--	-21
South Asia	867	599	517	400	54	-26	-31	-14	-2	-10
Bangladesh	157	205	94	--	14	3	31	-54	--	-44
India	376	129	90	--	8	-51	-66	-30	--	14
Pakistan	285	228	285	--	32	33	-20	25	--	19
China	692	239	88	200	14	27	-65	-63	0	600
Japan	6,935	5,663	5,139	5,500	408	18	-18	-9	0	9
Southeast Asia	1,218	842	725	800	69	1	-31	-14	14	-21
Indonesia	438	204	172	--	13	7	-53	-16	--	-54
Philippines	300	285	270	--	28	-21	-5	-5	--	-17
Other East Asia	3,631	3,138	2,787	3,300	310	10	-14	-11	18	27
Taiwan	1,409	1,342	1,108	--	123	14	-5	-17	--	48
Korea, Rep.	1,816	1,400	1,277	--	148	6	-23	-9	--	22
Hong Kong	407	396	399	--	39	18	-3	1	--	-5
Africa	2,868	2,527	2,135	1,800	129	26	-12	-16	-16	-31
North Africa	1,542	1,207	1,402	1,300	74	6	-22	16	0	-39
Morocco	341	156	159	--	20	52	-54	2	--	400
Algeria	162	220	330	--	24	-20	36	50	--	-35
Egypt	882	766	875	--	26	-3	-13	14	--	-64
Sub-Sahara	1,327	1,320	733	500	55	62	-1	-44	-32	-17
Nigeria	345	367	158	--	2	4	6	-57	--	-92
Rep. S. Africa	525	189	70	--	4	304	-64	-63	--	-60
Latin America & Caribbean	5,279	4,570	3,599	3,900	328	9	-13	-21	8	5
Brazil	438	557	444	--	14	10	27	-20	--	-85
Caribbean Islands	827	771	752	800	62	7	-7	-2	0	7
Central America	396	361	334	400	38	11	-9	-7	33	12
Colombia	220	238	137	--	21	-14	8	-42	--	425
Mexico	1,966	1,566	1,115	1,300	125	11	-20	-29	27	89
Peru	227	106	108	--	7	-12	-53	2	--	-13
Venezuela	778	721	493	--	37	26	-7	-32	--	61
Canada	1,836	1,727	1,466	1,800	126	4	-11	-15	23	0
Oceania	216	204	216	200	34	4	-6	6	0	100
Total	38,027	31,201	26,325	28,000	2,135	9	-18	-16	6	13
Developed Countries	19,180	15,225	13,963	14,500	989	4	-21	-8	4	12
Less Developed Countries	14,902	12,680	10,721	12,000	1,027	7	-15	-15	12	5
Centrally Planned Countries	3,945	3,296	1,640	1,500	118	67	-16	-50	-9	337

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. F = forecast.  
 -- not available.

Note: Adjusted for transshipments through Canada.

Information Contact: Steve MacDonald (202) 786-1621.



Farm Income

Table 32.—Farm Income Statistics

		Calendar years										
		1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
		\$ Billion										
1.	Farm receipts	97.5	114.3	133.8	142.0	144.1	147.1	141.1	146.7	149.2	140.2	136 to 138
	Crops (incl. net CCC loans)	48.6	53.2	62.3	71.7	72.5	72.3	67.1	69.4	74.4	63.6	56 to 58
	Livestock	47.6	59.2	69.2	68.0	69.2	70.3	69.4	72.9	69.8	71.6	73 to 75
	Farm related 1/	1.2	1.9	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	4 to 6
2.	Direct Government payments	1.8	3.0	1.4	1.3	1.8	3.5	9.3	8.4	7.7	11.8	14 to 16
	Cash payments	1.8	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	7 to 9
	Value of PIK Commodities	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	7 to 9
3.	Total gross farm income (4+5+6) 2/	108.8	128.4	150.7	149.3	166.3	163.5	153.1	174.7	166.0	159.5	160 to 162
4.	Gross cash income (1+2)	89.3	117.3	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	151 to 153
5.	Nonmoney income 3/	8.4	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.8	8 to 10
6.	Value of inventory change	1.1	1.9	5.0	-6.3	6.5	-1.4	-10.9	6.2	-2.7	-3.3	-3 to 0
7.	Cash expenses 4/	71.4	84.2	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	96 to 98
8.	Total expenses	88.9	103.2	123.3	133.1	139.4	140.0	140.4	142.7	133.7	122.1	116 to 118
9.	Net cash income (4-7)	27.8	33.1	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	53 to 57
10.	Net farm income (3-8)	19.9	25.2	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	41 to 45
	Deflated (1982\$)	29.5	34.9	34.9	18.8	28.5	23.5	12.2	29.7	29.1	32.9	35 to 39
11.	Off-farm income	26.1	29.7	33.8	34.7	35.8	36.4	37.0	38.3	42.5	44.7	47 to 49
12.	Loan changes 5/: Real estate	7.6	7.6	13.0	9.3	9.4	4.0	2.5	-0.8	-5.6	-7.3	-9 to -5
13.	5/: Nonreal estate	6.8	8.3	10.9	5.9	6.2	3.4	1.0	-0.8	-9.2	-10.5	-10 to -6
14.	Rental income plus monetary change	3.5	4.1	6.3	6.1	6.4	6.3	5.3	8.9	8.8	7.8	6 to 8
15.	Capital expenditures 5/	15.0	17.9	19.9	18.0	16.8	13.3	12.7	12.5	9.6	8.5	6 to 8
16.	Net cash flow (9+12+13+14-15)	30.8	35.1	43.7	37.5	37.9	38.4	33.6	33.6	31.6	33.4	38 to 42

F = forecast. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add due to rounding.

Information contact: Richard Kosi (202) 786-1808

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years 1/										
	1977 R	1978 R	1979 R	1980 R	1981 R	1982 R	1983 R	1984 R	1985 R	1986 P	1987 F
	\$ billion										
Assets											
Real estate	509.1	601.9	706.2	782.9	784.7	748.8	739.6	639.6	558.9	510.1	510 to 520
Non-real estate	142.5	175.3	201.6	213.2	212.0	212.2	205.4	208.9	191.2	181.5	179 to 181
Livestock & poultry	31.9	51.3	61.4	60.6	53.5	53.0	49.7	49.6	46.3	47.6	47 to 50
Machinery & motor vehicles	69.6	75.5	85.8	93.1	101.4	102.0	100.8	96.9	87.7	80.4	84 to 88
Crops stored 2/	20.6	25.3	29.2	33.0	29.1	27.7	23.7	29.6	23.1	18.4	11 to 15
Financial assets	20.4	23.1	25.3	26.5	28.0	29.5	31.3	32.8	34.2	35.0	34 to 38
Total farm assets	651.6	777.2	907.8	996.1	996.7	961.0	945.0	848.5	750.1	691.6	689 to 701
Liabilities											
Real estate 3/	58.4	66.7	79.7	89.6	98.7	102.5	104.8	103.7	97.7	88.1	81 to 84
Non-real estate 4/	52.4	60.7	71.8	77.1	83.6	87.0	87.9	87.1	77.5	66.8	56 to 60
Total farm liabilities	110.9	127.4	151.6	166.8	182.3	189.5	192.7	190.8	175.2	155.0	139 to 144
Total farm equity	540.7	649.7	756.2	829.3	814.4	771.5	752.3	657.7	574.9	536.6	550 to 557
	Percent										
Selected ratios											
Debt-to-assets	17.0	16.4	16.7	16.7	18.3	19.7	20.4	22.5	23.4	22.4	19 to 21
Debt-to-equity	20.5	19.6	20.0	20.1	22.4	24.6	25.6	29.0	30.5	28.9	25 to 27
Debt-to-net cash income	397	385	454	488	556	497	519	492	370	298	256 to 276

1/ As of December 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. R = revised. P = preliminary. F = forecast.

Information contact: Ken Erickson or Jim Ryan (202) 786-1798.

Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1985	1986	July	Aug	1985	1986	July	Aug	1985	1986	July	Aug
			1987	1987			1987	1987			1987	1987
\$ million 2/												
North Atlantic												
Maine	229	223	19	19	137	143	8	11	366	365	27	30
New Hampshire	70	72	6	6	36	38	2	3	106	109	8	9
Vermont	354	361	29	31	34	36	5	1	387	398	34	32
Massachusetts	128	131	11	11	262	292	16	23	389	423	27	34
Rhode Island	14	12	1	1	62	63	3	2	76	75	4	3
Connecticut	205	210	16	16	150	162	12	11	354	372	28	27
New York	1,847	1,809	139	142	730	724	66	86	2,578	2,533	206	228
New Jersey	144	150	13	12	443	430	67	56	587	580	79	69
Pennsylvania	2,184	2,239	183	180	1,003	926	59	67	3,187	3,165	243	247
North Central												
Ohio	1,515	1,566	141	139	2,602	2,043	109	70	4,117	3,610	250	209
Indiana	1,728	1,852	159	161	3,063	2,258	58	39	4,791	4,110	217	200
Illinois	2,055	2,143	192	192	5,915	4,737	121	83	7,970	6,880	313	276
Michigan	1,231	1,236	109	102	1,692	1,429	150	70	2,823	2,664	259	172
Wisconsin	4,055	4,164	361	353	1,019	892	63	86	5,075	5,057	474	439
Minnesota	3,370	3,395	290	306	3,223	2,680	114	168	6,594	6,074	405	474
Iowa	4,883	4,982	425	466	4,582	4,124	122	-61	9,465	9,106	548	403
Missouri	1,924	1,930	152	172	1,763	1,586	65	52	3,688	3,516	217	224
North Dakota	687	676	36	47	2,001	1,623	123	150	2,688	2,299	158	198
South Dakota	1,900	1,525	101	111	1,167	938	54	56	3,057	2,463	156	167
Nebraska	4,113	4,260	359	449	3,227	2,669	86	33	7,341	6,928	446	482
Kansas	3,336	3,447	363	312	2,552	1,978	236	201	5,888	5,425	599	513
Southern												
Delaware	353	402	29	29	139	118	7	11	492	520	36	40
Maryland	764	814	60	58	456	371	34	21	1,220	1,186	93	79
Virginia	1,062	1,127	96	92	623	486	48	20	1,684	1,613	144	113
West Virginia	191	156	12	13	56	71	3	8	247	227	15	21
North Carolina	1,958	2,174	154	164	1,971	1,608	41	49	3,929	3,782	195	213
South Carolina	415	455	34	37	621	440	36	19	1,036	894	71	56
Georgia	1,727	1,882	140	151	1,550	1,324	37	41	3,277	3,206	177	193
Florida	1,022	1,000	89	81	3,681	3,688	160	134	4,704	4,688	250	225
Kentucky	1,352	1,311	260	98	1,583	1,079	32	9	2,934	2,389	292	107
Tennessee	1,000	1,033	100	103	1,081	891	31	24	2,091	1,924	132	127
Alabama	1,301	1,431	107	131	773	578	32	19	2,074	2,009	139	150
Mississippi	1,011	1,044	86	87	1,240	741	-2	3	2,250	1,785	82	90
Arkansas	1,825	2,017	158	166	1,607	1,005	23	-42	3,433	3,022	181	123
Louisiana	491	503	50	56	993	869	7	16	1,485	1,372	57	71
Oklahoma	1,726	1,875	196	217	957	746	76	93	2,683	2,622	271	310
Texas	5,441	5,516	487	569	3,841	2,928	352	266	8,282	8,444	839	835
Western												
Montana	804	720	23	22	422	493	38	93	1,226	1,213	61	115
Idaho	874	884	68	82	1,219	1,042	43	132	2,093	1,925	110	214
Wyoming	478	455	16	22	123	111	7	18	600	566	23	41
Colorado	2,084	2,218	192	169	1,097	890	84	71	3,181	3,108	276	240
New Mexico	718	708	49	49	368	302	40	34	1,086	1,010	90	83
Arizona	693	699	56	59	813	796	88	21	1,506	1,495	143	80
Utah	413	437	44	40	142	134	15	11	555	570	59	51
Nevada	144	160	11	16	81	72	4	4	225	232	15	20
Washington	926	981	86	89	1,908	1,812	111	193	2,834	2,793	196	281
Oregon	622	649	57	73	1,115	1,135	155	123	1,737	1,784	212	195
California	4,324	4,446	410	413	9,826	9,602	851	661	14,150	14,049	1,261	1,074
Alaska	8	10	1	1	18	19	2	2	26	29	3	3
Hawaii	83	84	7	7	443	491	42	42	526	575	48	49
United States	69,780	71,573	6,182	6,334	74,413	63,612	3,936	3,302	144,193	135,185	10,118	9,636

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period.

2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 785-1804.



Table 35.—Cash Receipts from Farming

	Annual						1986	1987				
	1981	1982	1983	1984	1985	1986	Aug	Apr	May	June	July	Aug
	\$ million											
Farm marketings and CCC loans *	141,616	142,594	136,580	142,314	144,193	135,185	9,878	8,695	8,989	9,418	10,118	9,636
Livestock and products	69,151	70,257	69,437	72,936	69,780	71,573	6,455	6,294	6,311	5,915	6,182	6,334
Meat animals	39,748	40,917	38,893	40,832	38,589	39,437	3,401	3,741	3,747	3,442	3,499	3,824
Dairy products	18,095	18,234	18,763	17,944	18,063	17,824	1,456	1,507	1,516	1,457	1,455	1,468
Poultry and eggs	9,949	9,520	9,979	12,192	11,191	12,678	1,463	911	879	877	908	908
Other	1,358	1,586	1,801	1,968	1,937	1,934	136	134	138	140	321	134
Crops	72,465	72,338	67,143	69,378	74,413	63,612	3,423	2,401	2,679	3,503	3,936	3,302
Food grains	11,619	11,412	9,713	9,576	9,080	5,948	625	28	82	660	853	807
Feed crops	17,770	17,409	15,535	15,831	22,479	17,849	661	-190	-83	172	437	337
Cotton (lint and seed)	4,055	4,457	3,705	3,270	3,730	2,920	-153	-18	30	189	176	63
Tobacco	3,250	3,342	2,768	2,841	2,722	1,918	298	22	0	0	0	29
Oil-bearing crops	13,853	13,817	13,546	13,894	12,595	10,507	207	379	321	411	441	185
Vegetables and melons	8,772	8,063	8,462	9,142	8,558	8,705	797	889	1,144	924	861	809
Fruits and tree nuts	6,603	6,846	6,064	6,768	6,836	6,900	506	318	456	659	851	579
Other	6,543	6,993	7,352	8,057	8,413	8,865	483	975	739	487	517	493
Government payments	1,932	3,492	9,295	8,430	7,704	11,813	538	1,724	608	35	281	385
Total	143,548	146,086	145,875	150,744	151,897	146,998	10,416	10,419	9,597	9,453	10,399	10,021

\* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
	\$ million 2/									
Feed	16,036	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179	14,000 to 16,000
Livestock	10,150	13,012	10,670	8,999	9,684	8,814	9,498	8,996	9,609	11,000 to 13,000
Seed	2,638	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984	2,000 to 3,000
Farm-origin inputs	28,824	35,230	34,861	33,282	31,448	33,532	32,798	30,361	28,772	28,000 to 31,000
Fertilizer	6,620	7,369	9,491	9,409	8,018	7,067	7,429	7,259	5,787	4,000 to 5,000
Fuels and oils	4,609	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790	4,000 to 5,000
Electricity	1,389	1,447	1,526	1,747	2,041	2,146	2,166	2,150	2,121	2,000 to 3,000
Pesticides	2,656	3,436	3,539	4,201	4,282	4,154	4,767	4,817	4,331	3,300 to 4,300
Manufactured inputs	15,274	17,887	22,435	23,927	22,229	20,870	21,505	20,810	17,029	14,000 to 16,000
Short-term interest	5,167	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795	6,400 to 7,400
Real estate interest	5,060	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131	8,000 to 9,000
Total interest charges	10,227	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926	14,000 to 16,000
Repair and maintenance 3/	6,638	7,280	7,648	7,587	6,428	6,529	6,416	6,370	6,426	6,200 to 7,200
Hired labor	8,279	8,981	9,293	8,931	10,075	9,726	9,729	9,792	9,875	10,000 to 11,000
Machine hire and custom work	1,776	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,791	1,300 to 2,300
Dairy deduction	0	0	0	0	0	650	657	163	431	200 to 400
Marketing, storage, and transportation	2,508	3,162	3,070	3,523	4,301	3,904	4,012	4,127	3,652	3,000 to 4,000
Misc. operating expenses 4/	5,184	6,246	6,308	6,343	7,262	8,439	8,450	7,942	7,344	5,000 to 7,000
Other operating expenses	24,395	27,732	28,142	28,368	30,889	31,143	31,433	30,579	29,519	28,000 to 31,000
Capital consumption	16,963	19,345	21,474	23,573	24,287	23,873	23,105	20,891	18,997	17,000 to 18,000
Taxes	3,603	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125	4,000 to 5,000
Net rent to non-operator landlord	3,963	6,182	6,075	6,184	6,059	5,060	8,640	8,124	6,684	6,000 to 7,000
Other overhead expenses	24,529	29,398	31,440	34,003	34,381	33,402	35,805	33,247	29,806	26,000 to 29,000
Total production expenses	103,249	123,305	133,139	138,444	139,978	140,375	142,669	133,696	122,052	116,000 to 118,000

1/ Includes operator household. 2/ Totals may not add due to rounding. 3/ Beginning in 1982 repairs and maintenance excludes motor vehicle registration fees and insurance. 4/ Beginning in 1982, misc. operating expenses includes other livestock purchases and motor vehicle registration fees and insurance. F = forecast range.

Information contact: Richard Kodl (202) 786-1808; Craig Jagger (202) 786-1804.

Table 37.—CCC Net Outlays by Commodity &amp; Function

	Fiscal years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987E	1988E
	\$ million										
<b>Commodity</b>											
Feed grains	2,288	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,388	8,272
Wheat	844	308	879	1,543	2,238	3,419	2,536	4,691	3,440	2,787	2,042
Rice	-66	49	-76	24	164	664	333	990	947	1,020	753
Upland cotton	224	141	64	336	1,190	1,363	244	1,553	2,142	1,619	89
Tobacco	98	157	-88	-51	103	880	346	455	253	-326	-217
Dairy	240	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,238	993
Soybeans	31	4	116	87	169	288	-585	711	1,597	-446	47
Peanuts	-39	27	28	28	12	-6	1	12	32	7	1/
Sugar	395	313	-405	-121	-5	49	10	184	214	-350	--
Honey	3	-2	9	8	27	48	90	81	89	82	66
Wool	33	39	35	42	54	94	132	109	123	149	126
Other	1,608	1,407	-107	780	122	2,710	3,463	1,601	2,455	3,959	4,056
<b>Total</b>	<b>5,656</b>	<b>3,612</b>	<b>2,752</b>	<b>4,036</b>	<b>11,652</b>	<b>18,851</b>	<b>7,315</b>	<b>17,683</b>	<b>25,841</b>	<b>23,127</b>	<b>16,227</b>
<b>Function</b>											
Price support loans	1,377	2	-66	174	7,015	8,438	-27	6,272	13,628	11,549	5,618
Direct payments	2,268	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	6,109	3,876
Purchases	100	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	276
Producer storage payments	216	247	254	32	679	964	268	329	485	578	610
Processing, storage, & transportation	89	128	259	323	355	665	639	657	1,013	1,539	1,634
Operating expense	101	97	157	159	294	328	362	346	457	537	530
Interest expenditure	-106	238	518	220	-13	3,525	1,064	1,435	1,411	1,134	1,055
Export programs	948	417	-669	-940	65	398	743	134	102	459	615
Other	662	662	200	1,436	-265	-1,607	679	-648	329	1,701	2,013
<b>Total</b>	<b>5,656</b>	<b>3,612</b>	<b>2,752</b>	<b>4,036</b>	<b>11,652</b>	<b>18,851</b>	<b>7,315</b>	<b>17,683</b>	<b>25,841</b>	<b>23,127</b>	<b>16,227</b>

E = Estimated in the FY 1988 Mid-Season Review. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds). 1/ = less than 500,000.

Information contact: Richard Pazdalski (202) 447-5148

## Transportation

Table 38.—Rail Rates; Grain &amp; Fruit/Vegetable Shipments

	Annual			1986	1987					
	1984	1985	1986 P	Sept	Apr	May	June	July	Aug	Sept
<b>Rail freight rate index 1/</b> (Dec 1984=100)										
All products	99.3	100.0	100.7	100.6	100.1	100.0	100.2 P	100.1 P	100.2 P	100.2 P
Farm products	98.7	99.0	99.6	99.7	99.2	99.2	99.5 P	99.3 P	99.3 P	99.7 P
Grain	98.6	98.3	98.9	99.2	98.6	98.5	98.8 P	98.6 P	98.6 P	99.1 P
Food products	99.1	100.1	99.9	99.6	98.5	98.8	98.8 P	98.8 P	98.7 P	98.7 P
<b>Grain</b>										
Rail carloadings (thou cars) 2/	27.2	22.9	24.4	27.3	25.3 P	25.7 P	32.7 P	31.7 P	30.5 P	32.8 P
<b>Fresh fruit &amp; vegetable shipments</b>										
Piggy back (thou cwt) 3/ 4/	570	602	628	475	678 P	864 P	833 P	792 P	491 P	530 P
Rail (thou cwt) 3/ 4/	640	532	561	535	624 P	810 P	917 P	469 P	240 P	612 P
Truck (thou cwt) 3/ 4/	8,006	8,298	9,015	7,835	9,771 P	10,197 P	11,270 P	10,217 P	8,672 P	8,341 P
<b>Cost of operating trucks hauling produce 5/</b>										
Owner operator (cts/mile)	115.5	116.1	113.1	111.8	115.1	115.5	115.4	116.8	116.9	117.1
Fleet operation (cts/mile)	115.3	116.7	113.6	112.2	115.0	115.8	116.0	116.9	117.2	117.0

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1986 and 1987. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.O. Hutchinson (202) 786-1849.



## Indicators of Farm Productivity

Table 39.—Indexes of Farm Production Input Use & Productivity

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 2/
1977=100										
Farm output	100	104	111	104	118	116	96	112	119	113
All livestock products 3/	100	101	104	108	109	107	109	107	110	111
Meat animals	100	100	103	107	106	101	104	101	101	101
Dairy products	100	99	101	105	108	110	114	110	117	118
Poultry & eggs	100	106	114	115	119	119	120	123	128	133
All crops 4/	100	102	113	101	117	117	88	111	116	108
Feed grains	100	108	116	97	121	122	67	116	133	123
Hay & forage	100	106	108	98	106	109	100	107	106	106
Food grains	100	93	108	121	144	138	117	129	121	106
Sugar crops	100	101	94	97	107	96	93	95	97	106
Cotton	100	76	102	79	109	85	55	91	93	68
Tobacco	100	106	80	93	108	104	75	90	79	63
Oil crops	100	105	129	99	114	121	91	106	117	110
Cropland used for crops	100	97	100	101	102	101	88	99	98	94
Crop production per acre	100	105	113	100	115	116	100	112	118	115
Farm input 5/	100	102	105	103	102	100	97	96	94	NA
Farm real estate	100	100	103	103	103	103	101	99	97	NA
Mechanical power & machinery	100	104	104	101	98	94	90	88	83	NA
Agricultural chemicals	100	107	123	123	129	118	105	121	123	NA
Feed, seed & livestock purchases	100	108	115	114	108	106	108	104	110	NA
Farm output per unit of input	100	101	105	101	116	116	98	116	127	NA
Output per hour of labor 6/										
Farm	100	97	106	109	132	140	106	123	135	NA
Nonfarm	100	101	99	99	100	99	103	104	104	NA

1/ For historical data and indexes, see Economic Indicators of the Farm Sector: Production and Efficiency Statistics, 1985, ECIFS 5-5. 2/ Preliminary indexes for 1986 based on January 1987 Crop Production: 1986 Summary report and other releases of the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Bureau of Labor Statistics. NA = not available.

Information contact: Roger Conway (202) 786-1462.

## Food Supply and Use

Table 40.—Per Capita Food Consumption Indexes (1967 = 100)

(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.

Table 41.—Per Capita Consumption of Major Food Commodities (Retail Weight)

(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.



# AUDIO CASSETTES



OUTLOOK '88

## ANNUAL AGRICULTURAL OUTLOOK CONFERENCE

United States Department of Agriculture  
Washington, D.C. • Dec. 1-3, 1987

• Cassettes are only \$6.00 each • please check tapes desired •

- ☐ 87USDA-1A Opening Session
- ☐ 87USDA-1B (2 tape set)
- ☐ 87USDA-2A International Trade Challenges, Part 1
- ☐ 87USDA-2B International Trade Challenges, Part 2
- ☐ 87USDA-3 Panel: International Trade Challenges & U.S. Agriculture
- ☐ 87USDA-4 Feed Grains
- ☐ 87USDA-5 Food Grains & Grain Followup
- ☐ 87USDA-6 Generic Certificatas
- ☐ 87USDA-7 Livestock
- ☐ 87USDA-8 Meat and Poultry Trade
- ☐ 87USDA-9 Dalry
- ☐ 87USDA-10 Cotton
- ☐ 87USDA-11 Sweeteners

- ☐ 87USDA-12 Nutrition
- ☐ 87USDA-14 Oilseeds
- ☐ 87USDA-16 Fruit / Vegetables & Fruit / Vegetable Followup
- ☐ 87USDA-18 Sweeteners Followup
- ☐ 87USDA-19 Conservation
- ☐ 87USDA-20 Transportation
- ☐ 87USDA-21 Rural Development
- ☐ 87USDA-22 Forest Products
- ☐ 87USDA-23 Cotton Followup
- ☐ 87USDA-24 Tobacco
- ☐ 87USDA-25A Family Economics, Part 1
- ☐ 87USDA-25B Family Economics, Part 2
- ☐ 87USDA-26 Food Prices-Marketing

- ☐ 87USDA-27 Meeting the Challenge: Adapting to World Markets
- ☐ 87USDA-28 Meeting the Challenge: Farm Export Strategies
- ☐ 87USDA-29 Meeting the Challenge: Distinguished Panel on Trade and Policy Directions
- ☐ 87USDA-30A Farm Finance & Credit, Part 1
- ☐ 87USDA-30B Farm Finance & Credit, Part 2

**You can't afford to miss  
this vital Conference!**

**Now you don't have to.  
Order your tapes today!**

## Order Information

To order: Mail orders should be sent to Mobiltape at the address below. For credit card orders only, call "1-800-423-2050". Please allow two weeks for delivery.

Shipping Information: U.S., Canada, Mexico, \$4.00 per order:  
Foreign: \$1.50 per tape, \$4.00 minimum

Billing/P.O.: This form must be accompanied by a written purchase order. Tapes will be shipped upon receipt of P.O.

Payment method  
☐ Cash ☐ Check



Charge Card Number

Exp. Date

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Amount for tapes \$ \_\_\_\_\_  
Amount for accessories \$ \_\_\_\_\_  
Sales Tax (6 1/2% California) \$ \_\_\_\_\_  
Shipping & Handling \$ 4.00  
Total of Order \$ \_\_\_\_\_

## • DISCOUNTS •

- ☐ Any 6 tapes for the price of 5, only \$29.95
- ☐ Any 12 tapes for the price of 10, in a cassette album, only \$59.95
- ☐ All tapes listed above, in albums, for only \$145.95
- ☐ Cassette storage album, holds 12 cassettes, only \$4.00

Signature (required on mail in credit card orders)

Name \_\_\_\_\_

Company \_\_\_\_\_  
(please print)

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Telephone ( ) \_\_\_\_\_





Subscription Fee	
Domestic	Foreign
1 year \$12.00	1 year \$15.00
2 years \$22.00	2 years \$28.00
3 years \$32.00	3 years \$42.00
4 years \$42.00	4 years \$56.00
5 years \$52.00	5 years \$70.00

- ☐ Agricultural Exports (4 issues)
- ☐ Agricultural Resources (4)
- ☐ Cotton & Wool (3)
- ☐ Dairy (5)
- ☐ Feed (3)
- ☐ Fruit (4)
- ☐ Livestock & Poultry (4)
- ☐ Oil Crops (3)
- ☐ Rice (2)
- ☐ Sugar & Sweetener (3)
- ☐ Tobacco (4)
- ☐ Vegetable (3)
- ☐ Wheat (3)
- ☐ World Agriculture (4)
- ☐ World Agriculture Regionals (4)

Western Hemisphere, Eastern Europe, Western Europe, USSR, Middle East and North Africa, Subsaharan Africa, East Asia and Oceania, China, South Asia, Southeast Asia

For single copy prices, call (202) 783-3238

**Note:** Reports, issued periodically, provides descriptive information of current ERS research reports and other publications and their purchase prices. To be placed on the free mailing list for Reports, and for additional details about ordering publications, please contact: Information Division, Room 237, USDA, 1301 New York Avenue, N.W. Washington, D. C. 20005-4789, (202) 786-1512

### Other Publications

Subscription Fee	
Domestic	Foreign
\$5.00	\$6.25

☐ Foreign Agricultural Trade  
of the U.S. (8)

**HOW TO ORDER:** Check appropriate box. Calculate the total charges for subscriptions and enter below. If your address is outside the U.S., use "foreign" price. Make check or money order payable to Superintendent of Documents. Allow 6 weeks for processing. For faster service or foreign air mail information, call (202) 783-3238. Mail this entire form to: Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402

**Order Form** Mail To: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Enclosed is \$ \_\_\_\_\_ ☐ check,  
☐ money order, or charge to my  
 Deposit Account No. \_\_\_\_\_

							-	
--	--	--	--	--	--	--	---	--

Order No. \_\_\_\_\_

**MasterCard and  
VISA accepted.**



**Credit Card Orders Only**

Total charges \$ \_\_\_\_\_

Fill in the boxes below

Credit  
Card No.

Expiration Date  
Month/Year

[illegible]

Charge orders may be telephoned to the GPQ order desk at (202)783-3238 from 8 00 am to 4 00 pm eastern time, Monday-Friday (except holidays).

**For Office Use Only**

Quantity	Charges
_____ Publications	_____
_____ Subscriptions	_____
Special Shipping Charges	_____
International Handling	_____
Special Charges	_____
DPNR	_____
-----	
_____ UPNS	_____
_____ Balance Due	_____
_____ Discount	_____
_____ Refund	_____

Company or Personal Name

[illegible]

Additional address/attention line

[illegible]

Street address

[illegible]

City	State	ZIP Code

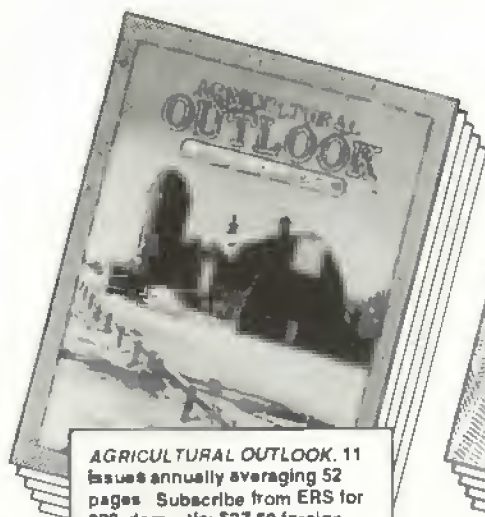
(or Country)

[illegible]

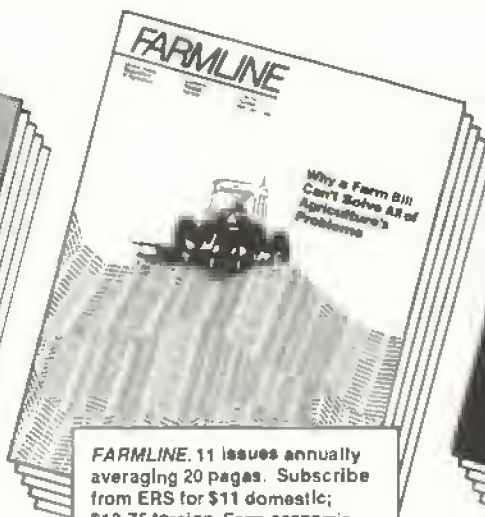
PLEASE PRINT OR TYPE

# Order Now

from USDA's Economic Research Service.



**AGRICULTURAL OUTLOOK.** 11 issues annually averaging 52 pages. Subscribe from ERS for \$22 domestic; \$27.50 foreign. USDA's official outlet for farm income and food price forecasts. Data and discussion of issues ranging from international trade to prospects for commodity supply and demand, food marketing, agricultural policies, and other major issues affecting agriculture and the economy.



**FARMLINE.** 11 issues annually averaging 20 pages. Subscribe from ERS for \$11 domestic; \$13.75 foreign. Farm economic information in an easily read style, reinforced with charts and statistics for those without time to review all the technical reports from ERS. Reports on all economic topics important to those involved in agriculture, with the focus on the causes and implications.



**NATIONAL FOOD REVIEW.** Quarterly averaging 40 pages. Subscribe from ERS for \$10.00 domestic; \$12.50 foreign. The latest developments in food prices, product safety, nutrition programs, consumption patterns, marketing, and processing technology for those who manage, monitor, or depend on the Nation's food system.

## How to Order

Check the box for each publication or insert the number of extra subscriptions you wish to order. Write one check or money order to cover total charges. You will receive a letter acknowledging your subscription. *Do not send cash. No credit cards. Sorry, no refunds.* Foreign customers note: only checks drawn on U.S. banks, cashier's checks, or international money orders accepted.

Publication	Domestic	Outside U.S.
<input type="checkbox"/> Agricultural Outlook 11 issues	\$22.00	\$27.50
<input type="checkbox"/> Farmline 11 issues	\$11.00	\$13.75
<input type="checkbox"/> National Food Review Quarterly	\$10.00	\$12.50

Make check or money order payable to:

USDA/ERS  
Box 1608  
Rockville, MD 20850

Enclosed is my check  
or money order for

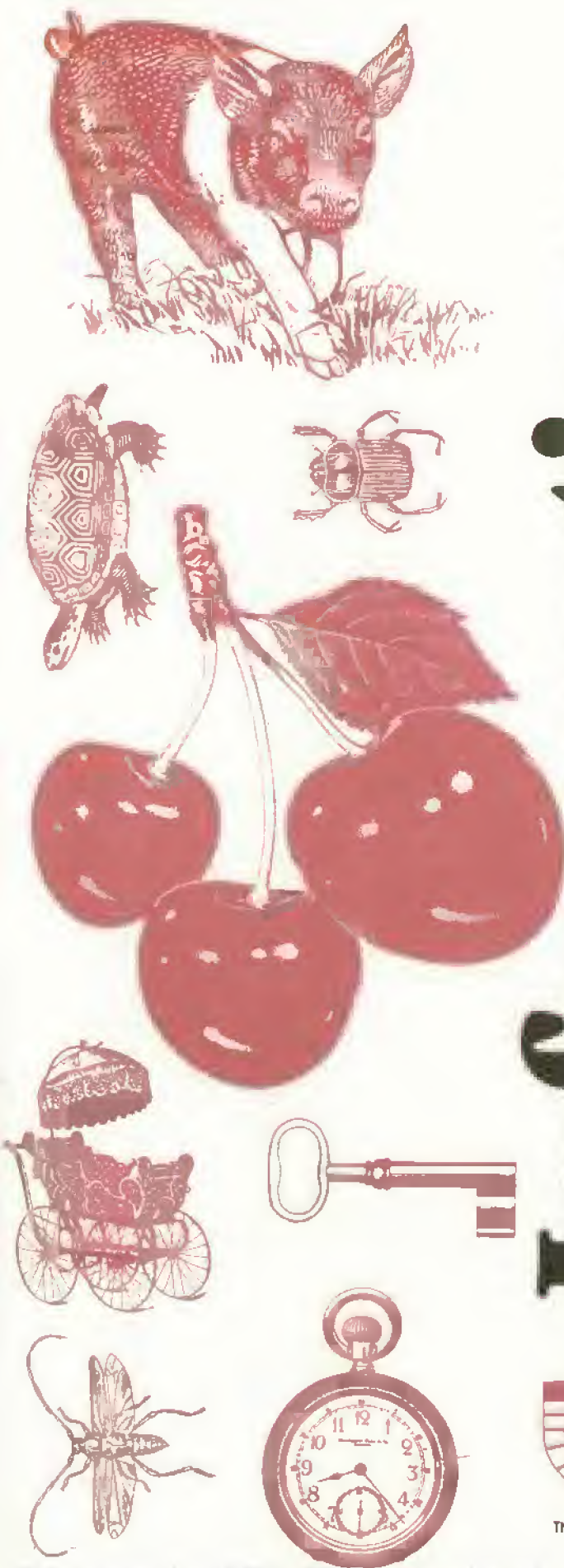
\$

Please print or type information below

For additional information, call (301) 953-2515.

NAME		DAYTIME PHONE NO. (    )		OFFICE USE ONLY  Date Rec'd  Amount  Pubs Rec'd  First Issue  Last Issue	
COMPANY OR ORGANIZATION					
STREET ADDRESS OR POST OFFICE BOX NO					
CITY		STATE	ZIP CODE		





# Information

Information from the Federal Government on subjects ranging from agriculture to zoology is available at Depository Libraries across the nation.

You can visit these libraries and use the Depository collections without charge.

To find one in your area, contact your local library or write: Federal Depository Library Program, Office of the Public Printer, Washington, DC 20401.



**Federal Depository  
Library Program**

This program is supported by The Advertising Council and is a public service of this publication

United States  
Department of Agriculture  
Washington, DC 20250

FIRST-CLASS MAIL  
POSTAGE & FEES PAID  
U.S. Dept. of Agriculture  
Permit No. G-145

OFFICIAL BUSINESS  
Penalty for Private Use, \$300

Moving? To change Your address, send  
this sheet with label intact, showing new  
address, to EMS Information, Rm. 228,  
1301 New York Ave., N.W., Washington,  
D.C. 20005-4788

